Lecture
ON THE
PRESENCE OF BILE IN THE SALIVA.

By SAMUEL FENWICK, M.D., F.R.C.P.,
PHYSICIAN TO, AND LECTURER ON MEDICINE AT, THE LONDON HOSPITAL.

We have seen that in persons affected with jaundice the colouring matter of the bile can be readily proved to exist in most of the structures and secretions of the body, as well as in any inflammatory exudations that may be present. It has, however, been denied that bile is ever found in the saliva. It is true that Huxham, Fourcroy, and Budd described this secretion as occasionally of a yellowish or greenish colour in this disease, but the fact has been disputed by Frerichs, Murchison, and most of the later authorities on diseases of the liver. If you collect a considerable quantity of the saliva of a jaundiced patient you will not, as a rule, be able to distinguish any difference in colour from the salivary secretion of a healthy person. In rare instances I have seen it of a greenish or yellowish hue, but I think this was only where decomposition had commenced. This is probably the explanation of the coloured saliva mentioned by Huxham and Budd, for in both of their cases salivation had been produced by mercury, and we may, therefore, presume decomposition had been set up. But if you evaporate the saliva of a jaundiced patient in a water bath the residue is usually of a yellowish colour, the colouring matter being soluble in chloroform, and apparently identical with the colouring matter of the bile. In some cases, as where the jaundice is intense, it is sufficient to shake up the saliva with alcohol, and throw it in a filter of white filter-paper. As the ring formed by the alcohol evaporates a yellowish stain may be observed.

A boy was lately admitted into the hospital with jaundice of five or six weeks' duration. The skin, conjunctivæ, and urine were intensely yellow. He was ordered to collect as much of his saliva as he could, and about one ounce was obtained, which on evaporation left a yellow residue. He was now subjected to treatment, and in ten days the colour had disappeared from the skin and urine. The saliva was again collected, and although the jaundice had apparently gone, a small proportion of pigment was still visible when it was evaporated.

I have examined the saliva in a large number of cases of jaundice, and, whenever the disease has been recent, have found the pigment on evaporation. The amount, however, varies, and in a few chronic cases, where the liver has been much destroyed, as by cancer, the colour has been slight or entirely absent. At different periods of the disease the quantity has increased or lessened, probably in proportion to the amount of obstruction of the duct. In some cases the residue on evaporation has been yellow, in others of a reddish-brown. Thus, two women of middle age were under my care at the same time. One had been jaundiced for fifteen months, had lost a great deal of flesh, and the liver could be felt to be much enlarged. Her saliva on evaporation left a light-yellow residue. Under treatment she gradually improved, the jaundice left her, she became stout, and although a hard mass can be now felt in the region of the gall-bladder, she remains quite well. In the other, the complaint was of a few months' standing, and the saliva afforded a reddish-brown residue. No permanent improvement occurred, and she returned to the hospital nine months afterwards, and died of scirrhus of the pancreas, obstructed duct, and atrophy of the liver. You might suppose from this that the different shades of colour in the saliva might be an assistance in diagnosis or prognosis; but such is, I think, not the case, for I have seen the brownish-red colour in the saliva of persons suffering from recent jaundice who have perfectly recovered.

You will remark that the pigment could be still detected in the saliva of the boy whose case I just mentioned to you, after the jaundice had apparently disappeared. I have convinced myself by other observations that this is not an uncommon circumstance, and you will naturally ask how it is to be explained. Merely, I believe, because you can detect a small amount of pigment in a colourless secretion like the saliva, when a slight trace cannot be recognised in the urine.

There are, as you know, two colouring matters in the bile—the bilirubin and the biliverdin,—the latter being an oxidised form of the other. In the cases I formerly mentioned to you, where an hydatid cyst communicating with large hepatic ducts had perforated the diaphragm so that the bile had entered the bronchial tubes, the sputa were of a very bright orange colour. We may consequently assume that the bile, when newly secreted, contains only the yellow pigment, and it is this which appears in the saliva in jaundice. At any rate, out of a great number of observations, I have only once seen the residue left by evaporation of a green colour.

The discovery of the colouring matter of the bile in the saliva of jaundiced persons throws an interesting light upon another point. You know there is no more common subject of complaint amongst patients than what they term "biliousness." They tell you their "livers are out of order," and in proof of it point to a yellowness at the back of their tongues, which is most observable in the early morning. The practitioner, on the contrary, often sees in such cases no evidence of disordered hepatic action. He finds the suspected organ normal in shape and size; the skin and conjunctivæ are not yellow, or only slightly so; and the urine, though high-coloured, affords no indication of the presence of bile. But in the boy whose case I have quoted the saliva contained pigment when the jaundice had apparently disappeared; and it seemed to me that it would be interesting to ascertain if the saliva were in a similar state in persons who are what is termed "bilious."

A young woman had suffered for six weeks from pain of the chest, flatulence, and other signs of dyspepsia, the back of her tongue being coated and yellow. Some of her saliva was collected, and, when evaporated, afforded a residue of a yellowish colour, which was soluble in chloroform, and was apparently biliary pigment. This experiment I have tried with other persons in a similar state, and with the same result.

Now you will readily see why the back of the tongue should in such cases present its yellow hue. During the day the saliva is swallowed as quickly as it is secreted, but in the night only enough enters the mouth to keep the mucous membrane moist. The heat of the mouth evaporates it, and thus the same result is obtained as when we operate upon the saliva in the laboratory.

We have only proved that the colouring matter is excreted by the salivary glands, but you will remember that the biliary salts are far more important constituents of the hepatic secretion than the pigment. They represent the greater part of the unoxidised sulphur that results from the disintegration of the albumen of the tissues, and are distinguished by an intense bitterness of taste. As these salts have been found in the urine in jaundice in small quantities, and as a bitter taste is occasionally experienced by persons affected with this disease, we might anticipate that they would be capable of discovery in the saliva along with the pigment. I have examined the saliva of a considerable number of jaundiced persons, by treating the residue obtained by evaporation with boiling alcohol, and, after filtering and evaporating, testing it with Pettenkofer's test. In some instances a doubtful result was obtained, but when the plan of adding ether to the alcoholic solution was observed, so as to precipitate the biliary salts, no evidence of their presence could be found. This might arise either from the biliary salts being present only in very minute quantities, or from the amount of saliva operated upon being too small; for the following case proves that they may be excreted by the salivary glands.

A gentleman belonging to the medical profession, aged seventy-three, consulted me for an intensely bitter taste he had been annoyed with for many months. The skin, conjunctivæ, and urine were uncoloured; he had never suffered from jaundice, and was, excepting this, in perfect health. The bitter taste was constantly present, and he always found it to be increased after taking alcohol in any form. I

requested him to collect as much of his saliva as he could, and he sent me about two ounces. This was evaporated, and left no yellow stain; the residue was treated with boiling alcohol, which was filtered and mixed with ether in a stoppered bottle. In a few days a fine precipitate had formed, which, when removed and dissolved in water, afforded the characteristic colour of the biliary salts with sulphuric acid and sugar.

Now, if we are to look upon jaundice as consisting in the presence of the hepatic secretion in the blood, this was a case of jaundice without the presence of the yellow colour usually supposed to be characteristic of it. What is difficult of explanation is that the biliary salts must have been present in the circulation for many months without any deterioration of the general health. We are told that these salts, when injected into the blood, produce jaundice, hæmorrhage, and slowness of the pulse, but there were no such symptoms in the gentleman in question.

The detection of the biliary salts in the above case seems to throw light upon those cases of "biliousness" in which bitterness of taste in the early morning is a prominent symptom. But you may fairly object that the presence of either the biliary pigment or of the taurocholate of soda in the circulation is insufficient to explain many of the symptoms from which a bilious patient suffers, for slight jaundice may be present for a considerable time without any great deterioration of the general health. You must remember, however, that under normal conditions the biliary salts are reabsorbed and decomposed in the circulation, and we may, therefore, suppose that in most bilious persons any excessive secretion of taurocholate of soda by the liver will be followed by an increased production of secondary sulphur compounds in the blood. Now, I am led by various experiments to believe that most of the symptoms recognised as arising from an excessive secretion or undue retention of bile in the organism are the result of an injurious action produced by these secondary sulphur compounds on the tissues. This subject, although most interesting, is far too wide to be discussed in the present lecture, but I hope on a future occasion to bring it under your notice.

CASE OF PARALYSIS OF THE ABDUCTORS OF THE VOCAL CORDS.

Being an extract from a Clinical Lecture on Paralytic Affections of the Larynx, delivered at the Royal Infirmary, Liverpool,

BY T. R. GLYNN, M.B. LOND.,
PHYSICIAN TO THE INFIRMARY.

GENTLEMEN,—I must now direct your attention to an example of a very uncommon affection of the laryngeal muscles—where the paralysis is confined to the abductors.

W. J——, aged thirty-six, married, a blacksmith, was admitted into No. 11 ward on January 16th, 1877. The moment he entered the out-patient room he excited your attention from the extraordinary noise he made; every inspiration was accompanied by a crowing sound similar to that made by a cuckoo clock or a child with croup, but much louder than either. On walking upstairs the exertion increased the dyspnœa from which he suffered, and exaggerated the noise into a discordant howl, which was heard through the neighbouring passages and wards, to the astonishment of nurses and patients. He told us (I now avail myself of the accurate notes taken by Mr. Hugh Williams) that "he had generally enjoyed good health, and was temperate in his habits. Never had any affection of the throat before. Had recently been laid up in the Northern Hospital suffering from an abscess and sinus in the right thigh, in consequence of an injury. There is no history of syphilis. On Christmas-day he walked several miles near the sea; it was foggy, cold, and damp, and he felt chilled. In the afternoon or evening of that day he noticed a pricking sensation in the fauces, as if a pin were sticking there. A cough came on, and three or four days afterwards he found that he made a noise when he drew his breath; his voice became weak, and his breathing difficult. He gradually grew worse, and for the last few nights has been unable to lie down.

"He is a light-complexioned, thin man. There is a sinus in the right thigh, and an eczematous rash on the right shoulder. His face is flushed. Respiration 26; each inspiration is accompanied with a loud cooing sound. The inspirations are laboured, and attended with sinking of the suprasternal, clavicular, and intercostal spaces. The expirations are more easy"; but they, too, were prolonged, there being little or no respiratory pause. "He has a noisy cough, and expectorates frothy mucus. Voice hoarse and weak, but preserved; pulse 78, full and hard; tongue clean; appetite good; urine normal."

Physical examination of lungs and heart disclosed nothing of moment.

"*Examination of larynx.*—The mucous membrane of the fauces appears to be redder than natural, and looks glossy. With the laryngoscope this appearance is found to extend into the larynx. There is a small ulcer on the tongue, close to the middle glosso-epiglottidean fold. The glottis is narrowed to a mere triangular slit, the cords being closely approximated; they do not separate during inspiration." Subsequent examinations confirmed these appearances, and disclosed the fact that the cords actually approached each other still more closely during inspiration, when they distinctly vibrated, producing the noise described; and separated during expiration.

"Jan. 17th.—He tried to sleep propped up in bed, and dozed a little; but he made so much noise when asleep that the patients would not permit him to close his eyes. As it was, no one could sleep near him or in the adjoining wards. When asleep, or when he lies down, his face becomes purple. His cough is very troublesome; he has expectorated a large quantity of frothy mucus. Ordered 'common diet'; ice to suck; and a mixture containing a quarter of a grain of extract of belladonna and twenty grains of bromide of potassium, three times a day. Fomentations to the neck.

"18th.—Had a much better night; did not make nearly so much noise; breathing much more quiet; inspiration only accompanied with a slight stridulous sound. In other respects he is much the same. Ordered iodide of potassium, ten grains, three times a day."

On the 19th he was again as bad as ever. The patience of all in the ward was exhausted, being especially tried at night. He had not been allowed to sleep, his neighbours shouting at him or pinching him whenever he tried to doze. I could not shut the man up by himself, as we have here, as you know, no means whatever of isolating patients. I applied a laryngeal electrode over the crico-arytenoidei postici, using the interrupted current, without decided alleviation, and then determined that tracheotomy should be performed. The operation was successfully carried out by Mr. Davison. The man was immediately relieved, and did very well, and peace was restored to the ward. On the 24th a vulcanite tube was substituted for the metal one, much to his comfort.

"25th.—Can speak (with tube closed, of course) much clearer than he could, but finds it difficult to breathe through the glottis. Respiration 22; pulse 78.

"26th.—Voice still stronger, and breathes through the glottis with very little noise. Allowed to get up. The mirror showed that some power of abduction was returning; the cords were continually being abducted and adducted, but only to a limited extent."

Soon after this he was furnished with a cork, which he kept in the tube by day, but took out when he went to bed in order that he might sleep without making a noise. When he did sleep with the cork in, those about him noticed that the sound he made had lost something of its old character, and was more like snoring. He remained in much the same condition for some time, and on March 1st I commenced using the interrupted current with Mackenzie's laryngeal electrode and necklet, after which he rapidly improved.

"March 9th.—The adductors are daily stimulated by the interrupted current. The glottis is much wider than formerly; the cords separate during inspiration now, and to the eighth of an inch.

"13th.—Discharged cured."

In considering the nature of this affection, you must bear in mind that every movement of the glottis, whether of

contraction or dilatation, as well as every dainty adjustment for vocalisation, depends on muscular action. The arytenoid cartilages are delicately poised, and supported by the tonic contraction of the muscles about them; here muscular energy is not, as it often is, antagonised by elastic force; in the condition of equilibrium the cords are maintained apart; with every inspiration their equilibrium is temporarily disturbed by the action of the crico-arytenoidei postici, the cords being still further separated and the glottis widened for the entrance of air. These muscles are the sole dilators of the glottis. The entrance of air into the lungs and the passage of air through the trachea are equally dependent on muscular energy. The crico-arytenoidei postici may thus be regarded as muscles of inspiration. When we saw that the glottis was never thoroughly open, the inference necessarily was, either that these muscles were paralysed, or that their antagonists by violent action overpowered them. From the absence of anything paroxysmal about the affection, and from the persistence of the symptoms, I believe that the former explanation is the correct one.

I have said we noticed that during inspiration the cords, instead of separating, actually approached each other more closely, that the narrow glottis was further narrowed, while during expiration the cords were separated and the chink widened. The explanation of this is, I think, to be found in the difference in the form of the upper and lower surfaces of the vocal cords. If you look at these casts (see Fig.) of the interior of the healthy larynx, you will observe

that the upper surface is flat or hollow, the lower oblique; therefore the inspiratory and expiratory blasts, when the cords are close together, act very differently upon them. While the inspiratory will drive them more closely together, the expiratory will separate them. This conformation of the cords leads to an aggravation of the dyspnœa in several affections of the glottis.

Our patient could not, when at his worst, inspire or even expire without producing a noise, because his cords were stretched and adducted in the position for phonation. His voice was weak and hoarse, probably from the absence of that support the arytenoid cartilages derive from the posterior crico-arytenoid muscles.

Ziemssen, in the "Cyclopædia of Medicine" (vol. vii., p. 959), gives particulars of nine cases of paralysis of the abductors of the cords. Eight he has collected from various sources, and one he observed himself. In these there was the same inspiratory dyspnœa and stridor, the voice was in some cases weakened, but never lost. The symptoms were developed slowly and were persistent. One case was complicated with paresis of the soft palate, and in this there was some difficulty experienced in swallowing, but in none of the others. I need not dwell further on the symptoms of this affection.

I have reason to hope that my patient will recover completely. The man has now (June 20th) been without the tube since March; the orifice in the trachea has closed, his breathing is easy and noiseless, and his voice natural.

On turning to Ziemssen's cases, we find that perfect recovery is uncommon. Out of the nine cases, one was completely cured, one improved sufficiently to breathe without the cannula, two continued to wear the cannula, four died, and one was lost sight of.

In the treatment of this affection stimulation of the affected muscles by the induced or constant currents is of the first importance. Situated at the back of the cricoid cartilage and lying immediately beneath the mucous membrane, these muscles are easily reached by an electrode passed into the pharynx. Tracheotomy must be resorted to if the symptoms become urgent; it was necessary in six of the cases before referred to.

I believe that the paralysis was due in my case to a morbid condition of the muscles themselves, and probably inflammatory and not dependent on any nerve lesion. There is the history of exposure to cold and of pain in the throat, the catarrhal condition of the mucous membrane of the throat, with the presence of an ulcer. This hypothesis seems also more in accordance with the facts observed than one which must invoke the existence of symmetrical and limited lesions of both recurrents.

ON THE USE OF THE ASPIRATOR IN HEPATIC ABSCESS.

BY E. H. CONDON, M.D.,
SURGEON-MAJOR, ARMY MEDICAL DEPARTMENT.

(*Concluded from page 275.*)

CASE 7.—Private Wm. S——, 1st Batt. 21st Fusiliers, aged twenty-eight years; service nine years. Admitted into the General Hospital, Madras, on the 28th July, 1874, suffering from a severe attack of hepatitis. Tongue furred; bowels costive; pulse quick and full; skin hot and dry; respiration hurried; liver much enlarged, very painful and tender. He was treated on the usual principles, and his side leeched and fomented, &c. The general pyrexia &c. were relieved, but the pain, tenderness, and enlargement of the liver remained. The temperature was very high, usually 103° F., but ranging between 99° and 103°.

On the morning of August 9th his liver was explored in two places in the most prominent part of the right lobe. The needle came out perfectly dry, and the aspirator failed to draw even a little blood or moisture into it. In a few hours he was almost free from pain in his side, and the next morning (August 10th) the enlargement of his liver was found greatly reduced, the pain and tenderness almost gone, so that his side was percussed and manipulated freely without causing him the slightest inconvenience. His temperature was normal, and his respiration 24.

From this time he steadily improved, all enlargement of the liver disappeared, and he was pronounced convalescent on the 20th of the same month.

He was under my observation in the regiment for about six months afterwards, and continued perfectly well, and always attributed his recovery to the operation.

CASE 8.—Corporal G. W. R——, R.A., aged twenty-three years; service three years. Admitted into the General Hospital, Madras, on the 21st August, 1874, suffering from a mild attack of hepatitis. There was only slight enlargement of the liver, but there was severe pain, which was confined to a small space between the cartilages of the eighth and ninth ribs. There was, however, extensive tenderness radiating from that spot, chiefly downward and to the left side; his temperature was usually 100° every evening, and only once it was 102°; his pulse ranged between 90 and 109, and his respiration between 24 and 36. His tongue was furred and his face sallow, with an anxious expression of countenance. He had no distinct rigors, but he occasionally perspired very severely.

He was treated with chloride of ammonium, Dover's powders, &c., and hot fomentations locally.

There was little change in his condition until the 8th of September, when the fine needle of the aspirator was passed into the liver between the cartilages of the eighth and ninth ribs to the depth of two inches, and about an ounce of the usual brownish pus drawn off. The operation relieved his pain, and he slept well that night for the first time since he was admitted into hospital. His temperature fell to normal, and never rose higher than 98·8° afterwards.

On the 15th September two ounces of thick pus were drawn off, the last half-ounce of which was bloody; the abscess was evidently emptied.

On the 17th the entry in his "case" was: "States that he has had no pain whatever in his side since last operation." His appetite and general health improved, but he was still very feeble.

On the 22nd, as he complained of the pain returning, the abscess was tapped, and an ounce and a half of matter that looked like a mixture of pus and serum drawn off.

On Oct. 1st the pain again returned, and on the following day an ounce of matter that looked like a mixture of pus, serum, and bile, was drawn off. From this time he improved steadily in general health and appearance, and on Nov. 8th he was pronounced convalescent, and was sent to England for change of climate.

On Nov. 4th a needle was inserted, and the abscess was found closed up.

Remarks.—The fixed pain in his side was the only guide to the abscess in this case, and it proved a true one; without it the chance of finding the abscess would have been small.

CASE 9.—Private Edward F——, 45th Regiment, aged thirty-seven years; eleven years' service. This man was admitted into the General Hospital, Madras, on the 6th September, 1874, on his arrival from Rangoon by steamer. His medical history recorded that he was admitted into the regimental hospital on the 19th of July suffering from a sharp attack of "hepatitis;" there was a good deal of pain in his right side, both anteriorly and posteriorly, and that "intermittent fever was a daily occurrence," rigors announcing the formation of an abscess (?) His general state improved under treatment, but "the pain in the hepatic region continued," and he was invalided to Madras. On arrival at Madras he was in a very weak emaciated condition, with a bedsore on his sacrum; he was suffering great pain and tenderness in his right side, and he was bathed in a cold perspiration. Abscess was diagnosed, and the morning after his arrival his liver was deeply explored in two places in search for it, but it was not discovered. Local symptoms were relieved by the operation, and he seemed to gain ground for a few days.

On the 12th a small trocar was inserted between the eleventh and twelfth ribs, four and a half inches from the spinous processes of the vertebræ, and eight and a half ounces of thick pus drawn off. The operation gave him great relief; his temperature fell to 99·4°; he passed a good night after it, and continued to improve generally until the 16th, when he got worse; his temperature again went up to 103°.

On the morning of the 17th, nine ounces of pus, slightly tinged with blood, were drawn off. The operation was followed by relief—of short duration, however, as on the 19th it was recorded of him: "Passed a bad night; complains of much pain in his side; hectic fever present; bedsore causes him great discomfort; temperature 104·2°." It was evident that there was another abscess, but the most careful examination of his side failed to give any indication of its situation, and the pain was referred to the region of the old abscess. His right side was found, on accurate measurement, to be the same size as the left. Under these circumstances, and as he was so low and had such an objection to the operation, it was not thought advisable to explore further.

On the 20th the abscess was again tapped, and two ounces of pus tinged with blood drawn off. He seemed a little better until the night of the 23rd, when he was suddenly seized with violent pain radiating over the abdomen from the right side. He fell into a state of collapse, and died at 7.30 the next morning.

Autopsy, eight hours after death.—Body extremely emaciated; rigor mortis present.—Thorax: Right lung highly congested; left lung normal. Heart normal.—Abdomen: Peritoneum inflamed; contained about three pints of serum and a little pus. Liver much enlarged, extending across into left hypochondrium; right lobe adherent to diaphragm above, abdominal walls at right side, and to the angle of colon and top of right kidney below. On removing the liver two abscesses were discovered in the under-surface of the right lobe, lying close together, with a ridge between. One of these was empty, and had clean reddish walls, which looked like the surface of a healthy granulating ulcer, and presented a marked contrast to the other, which was partly full, its walls smeared with thick pus of the same character as that which had been taken from the other one. This abscess had burst into the peritoneum by an opening about the size of a shilling just behind the angle of the colon. Both abscesses were of the same size, and each would contain about nine ounces of pus; weight of liver, 5 lb. 4 oz.

Remarks.—The abscesses in this case were doubtless formed soon after his admission into hospital at first. The "daily attacks of intermittent fever" recorded in his "detailed medical history" were probably several rigors, which ushered in the abscess. He had similar attacks almost daily while in Madras, which might have been easily mistaken for abortive attacks of ague. There was no record in his medical history sheet of his having suffered from intermittent fever previously. The contrast in the appearance of the two abscesses as they lay side by side on the dissecting-table was very striking. The one which was tapped looked clean and healthy, and it was apparent that reparative action had begun, while the walls of the other were covered with tenacious pus. Had the second abscess been evacuated the case would probably have done well, although he was in an almost dying state when the first abscess was tapped.

CASE 10.—Private William S——, 67th Regiment, aged twenty-four years; service five years. Suffered from a severe attack of hepatitis in June, 1874, when he was in Tonghoo, Burmah. He was sent to Rangoon for change of air in August of the same year, and was ultimately transferred to Madras, where he arrived on September 6th, convalescent. As there did not appear to be much the matter with him beyond being rather "washed out" from the effects of climate, he was not detained in hospital, but sent to barracks with many other convalescents. He continued tolerably well until September 13th, when he reported sick, complaining of pain in the region of the liver, and not feeling well. He said that he often suffered from severe perspirations at night, and he was anæmic. His temperature was normal. His right side was carefully examined, and no enlargement of the liver could be detected; on exact measurement his right side was found to be half an inch larger than the left. Pain was referred to a portion of the upper part of the right lobe, about as large as one's hand, and it was thought possible (normal temperature, and no enlargement of the organ notwithstanding) that an abscess in this situation might have been the cause of his trouble, and his history also strengthened that view. Accordingly, on the morning of the 14th, his liver was carefully explored in three places, but no matter was found. The operation seemed to have had no effect on him. On the following day he said he felt a little better on the whole, but that his side was just the same. On the 17th he was a little worse, and said that he had a shivering fit in the night; his liver was again explored in two other places, but no trace of matter was found. On the 22nd the report of him was "about the same; the exploration did not make any change. Temperature normal." He continued much in the same state until the 10th of October, when he was discharged to proceed to the convalescent depôt, Poonamallie.

Remarks.—The probability is that there was very little the matter with this man's liver. The broken-down state of his health and anæmic condition were enough to account for his state, excepting the pain he suffered in his side. His liver was deeply explored in *five* places, without causing him any inconvenience, and he only felt a sharp prick when the instrument entered his side; once it reached the liver he felt no pain, and as it was passed, little by little, deeply into the liver, he could not feel it, which would go to show that the liver is not at all sensitive.

Note.—The medical officer under whose care the above man was at Poonamallie after he left my hands, has since told me that there was not much the matter with him beyond "canteen dyspepsia."

CASE 11.—Private H. R——, 45th Regiment, aged thirty years; service ten years. Admitted into the General Hospital, Madras, on his arrival from Rangoon, Jan. 29th, 1875. The following is an epitome of his medical history:—"Had an attack of diarrhœa in July, 1874. Since then has had three admissions—one for dysentery and two for hepatitis; making altogether, up to date, 110 days under treatment. His disease is aggravated by the presence of hæmorrhoids, both external and internal; he is very much reduced in strength and weight, having lost twenty-six pounds."

Symptoms on admission.—Is in a very exhausted condition. Skin covered with perspiration. Severe pain in region of

liver, which is very tender to the touch and slightly puffed out at the margin of the costal cartilage. He is very restless, and is unable to lie on his right side; and states that he cannot sleep in any position, from the pain in his side. Temperature 103°; pulse 100, and weak.

On Feb. 1st the fine needle of Dieulafoy's aspirator was inserted below the margin of the costal cartilages two inches from the mesial line, and again between the eighth and ninth ribs in a line below the nipple, but no matter was found. The operation relieved all his symptoms, and he had a good night afterwards, the first he had had for a long time.

Feb. 2nd.—As I was convinced of the presence of an abscess, I again inserted the needle in the same spot where the first exploration was made, but more deeply, and drew off a small quantity of pus, which was followed by *complete* relief. The enlargement of his liver subsided, all pain and tenderness disappeared, and when visited on the following morning, the change which had taken place was most remarkable. He had slept well during the night, was hungry for his breakfast, had no pain or tenderness in his side, and said he was "all right."

4th.—Tapped in the same hole, and a small quantity of pus drawn off. Temperature 98°; pulse 82.

5th.—Patient has improved considerably; no pain, no tenderness, no swelling, and he can lie and sleep on either side.

8th. — About an ounce of pus taken from the abscess. Temperature normal.

13th. — About half an ounce of pus taken from the abscess.

18th. — About an ounce of pus drawn off. The wound in the skin is a little inflamed and sore.

As I was leaving Madras, I handed over charge of the patient to Surgeon-Major Comyn on Feb. 20th, who made the following note in the case-book: "The man is in good spirits and probably improving; no external discharge."

He left Madras on March 11th, when it was recorded of him: "Has been improving steadily and gaining flesh and strength since last report. He does not perspire at night. Says that he is getting strength daily. No pain in side, but slight heaviness. Wound quite healed; secretions regular. Having been invalided home, he proceeds by rail this day to Deolallee."

I returned to England in the same troop-ship with him. During the voyage he knocked about and ate the usual soldier's rations, and landed at Portsmouth on the 29th of April, fat and well.

Remarks.—This case should have been seen to enable one to realise the wonderful change wrought by the operation. When admitted he looked like a dying man, worn out from constant suffering day and night, and in a few days he was restored to comparative health and comfort. The abscess was not found in the first instance, because the needle was not inserted deep enough; it was in a thin part of the liver, and as the extent of enlargement could not be ascertained in consequence of his side being too tender and painful to admit of it being percussed or manipulated, there was danger of passing the needle right through it. He suffered much from dyspepsia and flatulence, but these symptoms passed off as his side got better.

CASE 12.—Captain H. M. H——, 18th Hussars, aged thirty-eight years; service thirteen years and ten months; Period of residence in India eight years and four months; station Bangalore. I am indebted to Surgeon-major Scott, 18th Hussars, for the following history of this case:—"Suffered off and on from sluggishness and general derangement of the liver, associated with hæmorrhoids, since 1869. He visited Madras in 1874, and while there contracted the common continued fever of the country, which lasted only a few days, but left him in a delicate state of health, with some symptoms of hepatic derangement and a return of his hæmorrhoids. About the middle of January, 1875, after his return to Bangalore, he contracted a severe form of remittent fever, which rapidly prostrated his strength; a considerable amount of hepatic derangement, gastric irritation, and bilious diarrhœa existed. The remissions were by no means well marked, the exacerbations coming on daily in the afternoon, the temperature then being 102·5° and 101° during the remission."

The fever was got under sufficiently by large doses of quinine to admit of his removal to Madras on the 5th February, but the liver symptoms were unrelieved, and an abscess formed. On the 6th of February he arrived in Madras from Bangalore, and I saw him the same day in consultation with Dr. Scott, 18th Hussars, Dr. Colvin Smith, and Dr. Harris, of the Indian Medical Department. He lay in bed in a very prostrate condition and much emaciated; his face was of a peculiar sallow, muddy colour, with an anxious expression of countenance; conjunctiva not jaundiced, tongue deeply furred, dry and brown in the centre, with red tip and edges. Pulse 124, full and compressible; temperature 103°.

The right lobe of his liver was normal, left was much enlarged; there was a slight bulging just below the ensiform cartilage, and indistinct fluctuation could be felt; the impulse of the heart's action was plainly felt on placing the hand over the tumour, and it was evident that the abscess was in contact with the pericardium; there was very little pain or tenderness on pressure.

Dr. Colvin Smith explored the abscess with the fine needle of the aspirator, entering it about an inch below the ensiform cartilage, and drew off an ounce and a half of very thick brownish pus. The instrument caused some pain when entering the abscess. The general symptoms were not relieved by the operation. He was so weak that it was not thought advisable to tap the abscess that night; accordingly, the abscess was tapped by Dr. Colvin Smith the following morning, and six ounces of thick pus drawn off. During the operation he became very weak and faint, and was given some brandy.

On the 9th the abscess was again tapped, and eight ounces of matter, which was perfectly free from smell, taken away. The first seven ounces of matter were much thinner than before; the last ounce was thick and bloody. Inserting the trocar caused a good deal of pain, and he became almost pulseless, but gradually revived. The course of the malarious fever was not influenced by the operation, and he gradually sank, and died on the 11th February, twenty-six days from the commencement of the fever. No post-mortem examination was obtained.

Remarks.—In this case the abscess was masked by the fever. The latter was so severe from first to last that it is doubtful to what extent the fatal termination of the case was influenced by the hepatic abscess. The patient had the appearance of a man whose system was poisoned with malaria. The cannula could be passed inwards, upwards, and to the left side, for about four inches and a half, when it rested against the pericardium, and the apex of the heart was felt to strike the end of the instrument at each pulsation. The wall of the abscess was doubtless adherent to the pericardium, into which it would probably have pointed had it not been tapped. The danger of using a pen-shaped unsheathed instrument in the above and similar cases is evident.

REMARKS ON RHEUMATIC PURPURA.

BY ROBERT LIVEING, M.D., F.R.C.P.,
LATELY PHYSICIAN TO THE MIDDLESEX HOSPITAL, AND PHYSICIAN IN CHARGE OF THE SKIN DEPARTMENT.

RHEUMATIC PURPURA, or peliosis rheumatica, is a disease with fairly well defined symptoms. Thus far most observers are agreed, but they hold very different views as to its nature and affinities. By some it is regarded as a form of rheumatism, by others as a kind of purpura, and by a third class as a scorbutic affection. It is really, however, a variety of erythema in which cutaneous hæmorrhages and joint affections are prominent features.

Not long ago two typical examples of this affection came under my care at the Middlesex Hospital: one in the case of a delicate-looking young man, who was admitted into my ward with symptoms of a mild attack of acute rheumatism, but without any serious symptoms. Both ankles were red, swollen, and painful, and on the dorsum of each foot were raised patches of erythema, with large purpuric spots. Numerous spots of purpura without erythema were present on the legs, and a few small erythematous papules on the

forearms and backs of the hands. The case ran a somewhat protracted course of several weeks. The knee-joints became affected, and fresh purpuric spots appeared from time to time on the legs and feet. After some weeks my patient appeared to be quite convalescent; just, however, as he was about to be discharged he had a relapse, with a recurrence of all the former symptoms. The whole attack lasted about two months. He had had a similar one some years previously. The second case was very similar, but of a milder type.

A very good example of "rheumatism with purpura" is described in Vol. III. of the London Hospital Reports. A man aged thirty three was admitted under the care of Dr. Davies. "Three days before admission he noticed large purple spots appearing on the inside of his ankles and knees; he thought very little of this, however, but applied to be taken in on account of his rheumatism. There had been no bleeding from any mucous membrane. On admission he complained of some pain in his joints, but the symptoms were not very acute. On the inner side of his ankles, on his insteps, and on his arms, were large purplish blotches." One month after his admission we have the following note:—"There are no spots anywhere on the skin, and the pain has quite left the joints;" but ten days later he was "in bed again with a slight return of the rheumatism;" and two days afterwards we have the following note:—"This evening several raised patches of a purplish colour have appeared about him, which seem to be a mixture of the purpuric rash with urticaria. There is *very little irritation*, and he does not seem to suffer much constitutionally." The "very little irritation" of the spots would seem to correspond with patches of erythema rather than true urticaria. In this case of Dr. Davies there was sloughing of one of the purpuric spots on the left arm, and also a peculiar effusion into the scrotum and the neighbouring tissues. Dr. Perrond, of Lyons, has recorded a similar case, in which a mortification of skin occurred, and also the development of phlyctenulæ on some of the purpuric spots.

As early as 1829 Professor Schönlein described, under the name peliosis rheumatica what he regarded as a new disease, characterised by an eruption of purpuric spots accompanied with acute articular pains. Later on, Hebra and others recognised this as a distinct disease, and his description of it corresponds pretty closely with that of Schönlein. He says that the disease begins with dragging pains in the joints, and feverish symptoms, and that when dark-red, livid, or almost black spots appear on the skin, the rheumatic pains subside. He also mentions the fact that the disease is most frequent between the ages of twenty and thirty, and more common in men than in women. Fuchs, and most of the other German writers on this subject, regard the disease as allied to rheumatism, but yet sufficiently distinct to be considered as an independent disease, and distinct from both purpura and erythema. Wunderlich is, however, an exception to the rule, and looks upon the malady as simply a variety of purpura, and the articular pains as merely an epiphenomenon; while Dr. Bohn, of Konigsberg, regards peliosis rheumatica as identical with erythema nodosum, and conjectures that in both cases the eruption is produced by embolism of the cutaneous capillaries.

The French writers, who have written largely on the subject of peliosis rheumatica, are almost unanimous in regarding the disease as a variety of erythema nodosum. In 1858 MM. Legrand and Durian published a monograph on Rheumatismal Peliosis, or Rheumatismal Erythema Nodosum, in which, by an analysis of cases, they claim to show an identity as regards the etiology and symptoms of this disease with erythema nodosum. The peculiarities of the eruption as described by the Germans are regarded by them as hardly sufficient to constitute even a variety of erythema nodosum; in short, they consider the two diseases as absolutely identical. Bazin follows on the same side: he says—"Enfin, en Allemagne, le Professeur Schœnlein a donné, sous le nom de péliose rhumatismale, l'histoire de l'affection décrite en France sous le nom d'érythème noueux."

In an able paper published in the *American Archives of Dermatology*, 1875, Dr. Kinnicutt points out what he believes are the differences between peliosis rheumatica and simple purpura, and says that the articular pains of the former must not be confounded with the muscular pains of the latter; also that the hæmorrhages in peliosis rheumatica are all superficial, and do not occur in deep-seated tissues or mucous membranes, as in the graver forms of purpura. As to the identity of peliosis rheumatica with erythema nodosum, he remarks: "Are we not, therefore, justified in concluding that the only point of resemblance between the eruption of this affection and that of purpura rheumatica consists in an extravasation of blood, occurring as we know in various dermatoses, and a certain tendency to recurrence?" In one disease there is true inflammation, in the other simple hæmorrhage. "Aside from the cutaneous affections, do we find evidence of identity?" He considers that the absence of arthritic symptoms in many cases of erythema nodosum is an important point in favour of the non-identity of the two affections, as such symptoms are pathognomonic of peliosis rheumatica, as recognised by the Germans. His final conclusions are briefly as follows:—1. That purpura rheumatica (Schönlein) is identified by the *superficial character of the eruption accompanied or followed by rheumatic symptoms, and a marked tendency to recurrence*, the disturbance of the general economy being, in uncomplicated cases, comparatively insignificant. 2. That these characters are sufficient for differentiation from different forms of purpura on the one hand and erythema nodosum on the other. 3. That we are compelled to accord the disease an independent and well-defined position.

Now, no one doubts that arthritic symptoms are common in ordinary erythema nodosum. Speaking of this disease, Sir T. Watson says: "Rayer has seen it occur in connexion with acute rheumatism. So have I. A patient of mine was attacked with acute rheumatism of the joints immediately upon the cessation of erythema nodosum. In another this order was reversed." Trousseau, in his clinical lectures, remarks: "The articular pains which precede and accompany the eruption seem to me to be characteristic of erythema nodosum." That cutaneous hæmorrhage commonly occurs in the swellings of erythema nodosum is admitted on all hands, and the fact that this affection is very apt to recur is also generally acknowledged. How, then, are we to draw a distinct line between erythema and purpura rheumatica?

Having had several cases of purpura rheumatica under my own care, and having also referred to very many recorded cases, I have been forced to the conclusion that many distinct diseases have been classed under this head simply because they have been attended with cutaneous hæmorrhages and pains in the joints. Purpura is a *symptom* rather than a *disease*, and may and does occur in many severe diseases. Now, in order to judge fairly of a disease, it is necessary to examine it in its uncomplicated form; if it only occurs in the course of more serious maladies, it must be regarded as an accidental complication of those maladies rather than a well-defined disease.

Among the many recorded cases of rheumatic purpura I find a certain small percentage of genuine scurvy, overlooked because the disease occurred under unusual circumstances, and when scurvy was not to be expected. There are also very large numbers of cases recorded under the head of purpura rheumatica where the symptoms have been developed in the course of such grave diseases as advanced phthisis, empyema, kidney disease, pyæmia, morbus cordis, &c., and I have myself met with cases of this kind; but in all these instances the purpura and pains in the joints do not constitute a definite disease. Excluding, however, all these, there still remains a large number of recorded cases similar to the one I have related above, which are uncomplicated with serious organic changes, and which recover perfectly; these are the cases which cannot, in my opinion, be separated from the symmetrical forms of erythema (erythema nodosum, papulatum, &c.). The symptoms in all are alike; there is slight constitutional disturbance, articular pains, and sometimes redness and swelling about the joints, with purpuric spots on the skin, either with or without distinct patches of erythema. Usually within a few weeks or months all these symptoms disappear, and the patient is well. Between this not very uncommon affection and symmetrical erythema I can find no line of demarcation whatsoever.

Since writing the above, I have read with much interest Dr R. Southey's case of purpura rheumatica in THE LANCET of July 7th. It belongs, in my opinion, to the class of cases I have pointed out where purpura occurs in the course of some serious malady. There are certain pathological con-

ditions common to many different diseases (chronic nephritis is only one of these, heart disease is another) which favour the development of purpura; but this is not what many of the German and American and all the French writers understand by purpura rheumatica.

ON INCISION OF HYDROCELE ANTISEPTICALLY AS A MEANS OF RADICAL CURE IN CERTAIN CASES.[1]

BY W. H. A. JACOBSON, M.B., F.R.C.S.,
ASSISTANT-SURGEON TO GUY'S HOSPITAL.

ON the first occasion of my making use of this method, about a twelvemonth ago, I was not aware that any such operation had been already performed, but I have found recently that it has been rather largely employed by Prof. Volkmann of Halle[2]. In this country Mr. Howse has made use of it on one or two occasions.

I propose first to give an account of the operation as made use of by myself, then to speak of its disadvantages and advantages, and finally to mention the cases to which this method would appear to me especially applicable. And before going further I wish to make it quite plain that I do not bring this method forward as one preferable in ordinary cases to that usually employed—viz., the injection with iodine.

Given, then, a patient with hydrocele, in whom this method is to be employed, the only preliminary required is to shave the pubes and scrotum on the affected side; an incision is then made with the ordinary antiseptic precautions over the upper part of the hydrocele downwards for a distance varying with its size, one of about two inches will usually be sufficient. This incision should go at once down to the tunica vaginalis, which is nearly always thickened, and readily recognised. A corresponding incision is then made through the tunica vaginalis, and this should be done quickly; otherwise, as the long-stretched dartos rapidly contracts, the resulting aperture will be found too small for the satisfactory carrying out of the next step. This consists in tucking in a narrow strip of gauze soaked in carbolic oil. The object of this is to ensure that granulations shall spring up all over the opened sac so as to procure its obliteration[3]. The usual antiseptic dressings are then applied, overlapping the wound carefully in every direction, perforated for the passage of the penis, and kept in position by a double spica bandage. The wound should be dressed once in the two following days, after this every second, third, or fourth day. All that is required is to syringe out the wound with a solution of carbolic acid (1 in 40), and on the first one or two occasions to reinsert a fresh strip of oiled gauze. Four or five days after the operation the patient may get up, and at the end of a fortnight he may leave the hospital. If the wound has not completely healed by this time all that will be left will be a small granulating surface, and the only treatment needed is to reapply every other day a bit of boracic lint, and to keep the testicle suspended a little longer.

To proceed with the disadvantages of the operation:—

1. It involves more trouble undoubtedly than the treatment by injection. The operation itself may be completed in ten minutes, but an anæsthetic will generally be required, and there is the trouble of the subsequent dressings.

2. Another objection may be raised that this method must require a much longer time than that of injection. To a certain extent only is this objection a valid one. The five cases which I treated in this way had an average duration of treatment of just over three weeks. I find, from an analysis of forty-three cases in which iodine was injected, the average duration of treatment, or rather of their stay in the hospital, was quite fifteen days. But, as bearing upon this question of time, I find frequently at the end of the reports of these cases of patients who, after injection, left the hospital at the end of the second week, some such note as, "Scrotum as large as before, but painless," "Scrotum still twice natural size," &c. It is obvious therefore that a patient cannot do much work in this condition. Mr. Curling[4] says, speaking of the cure by injection of iodine, "in about three weeks the cure is usually accomplished." If therefore three weeks and a few days be allowed as the time required for the accomplishing of the cure after the antiseptic incision, the difference is but slight.

3. It may be objected that such an operation as the one described above is severe, and involves risk. In answer to this it is only fair to remember that incising the tunica vaginalis with antiseptic precautions is totally different from the operation of incision as carried out a hundred years ago. For instance, Samuel Sharp (one of the earliest surgeons at Guy's Hospital) describes four cases treated by the old method of incision in his Treatise on the Operations of Surgery (published 1739). From the severe "symptomatick" or traumatic fever, and the smart secondary hæmorrhage from the vessels of the inflamed scrotum, the suppuration and sloughing, he speaks of these cases as "a catalogue of misfortunes," and of himself as having been threatened with the death of his patients, though none actually died. Contrast this with the cases operated on by the antiseptic incision, the temperature in not one of them rising at any time higher than 99·8°, and that only in the thirty-six hours following the operation, then at once falling to normal, and remaining so throughout the rest of the treatment; any constitutional disturbance present during the first twenty-four hours being of the most trivial kind, and afterwards entirely absent.

I have spoken separately of the disadvantages of this method. In bringing this paper to an end I will consider together the advantages of the method and the cases to which it would appear to me to be especially applicable.

(a) It is absolutely certain, for the cavity of the tunica vaginalis is obliterated by granulations. On account of this advantage I should be inclined to use this method where attempts at a radical cure by injection with iodine have already failed. I quite admit that this is rare, but it undoubtedly does occur. Out of forty-four cases of which I have notes, the injection with iodine failed in eight, and in two of these it failed twice. I may add that these cases were under the care of the surgeons and assistant-surgeons at Guy's Hospital, and that in some cases the injection used was of the ordinary strength, equal parts of water and the tincture; in others the undiluted tincture. I would also make use of this method, not only where injection has already failed, but also where there is a risk of its failing—i.e., where the sac has very thickened walls, or where the hydrocele is very large in size; for here, too, the injection by iodine may fail, partly because all the fluid may not be removed by tapping, and also on account of the difficulty of bringing the iodine injected thoroughly in contact with the inner surface of the tunica vaginalis.

(b) This method may be safely employed in cases where a radical cure is desired, but where from ill-health or age injection with iodine may be thought to be contra-indicated. Thus one of the cases in which I used it was that of a dissipated London tavern-waiter much let down in health, and having a crop of boils about him, and a small carbuncle on his neck. The man was about fifty, and the hydrocele a large one, which had been tapped ten times. In this case I should not have liked to have employed the iodine injection, but I had no hesitation in employing the antiseptic incision, and the man was relieved of his troubles at one and the same time, for, while the tunica vaginalis was filling up, his neck healed.

(c) In some cases of congenital hydrocele which have resisted milder means, I believe that a careful incision, with antiseptic precautions, will obliterate the communication with the peritoneal cavity quite as safely and far more surely than the pressure of a truss, which is usually recommended to be perseveringly applied. [Since this paper was read, a

[1] Abstract of a paper read before the Hunterian Society, April 11th, 1877.
[2] Berlin Klinische Wochenschrift, No. 3, 1876; Med. Record, April, 1876; Deutsche Zeitschrift für Chirurgie, July, 1876.
[3] Prof. Volkmann, I find, on the other hand, endeavours to keep the surfaces of the incised tunica vaginalis in apposition, and so as to insure their adhesion.
[4] Diseases of the Testis, Third Edition, p. 135.

case of congenital hydrocele in a boy aged seven has come under my care. Discutient lotions and blistering with iodine having had no effect, the sac was incised with antiseptic precautions, and the inguinal canal carefully plugged with a strip of carbolised gauze for forty-eight hours. The child was cured, having had no bad symptom from first to last.] It would appear to me that this method might also be found useful in certain other cases of hydrocele in children—viz., where the point of obliteration of the peritoneal cavity is high up, or, in other words, near to the peritoneal cavity.

(*d*) There are certain, though not very common, complications of hydrocele in which the surgeon may be desirous of exploring the cavity of the tunica vaginalis. Thus many will remember the case of hydrocele related by Sir B. Brodie, where the patient, after each tapping, used to suffer excessive pain, "lying down on the floor and groaning with agony for a quarter of an hour." After death, a loose cartilage was found in the tunica vaginalis cavity. Prof. Humphry relates a somewhat similar case.[5] These bodies may originate in one of two ways—(1) by some inflammatory material deposited in or beneath the tunica vaginalis gradually being pushed forwards, and, as in the knee-joint, becoming stalked and then detached; (2) and I should think more commonly, as pointed out by Mr. Osborn in vol. v. of St. Thomas's Hospital Reports, they originate in the hydatid of Morgagni. That this may be so was well shown in one of the cases which I treated by incision. In this case, after the fluid had escaped, the hydatid of Morgagni was seen in its usual place and of its usual size. In addition to this was another body with a long and very narrow peduncle. This might readily have become detached, and, already fibrous, on becoming solid might have been in its structure and behaviour much like a foreign body in a joint.

Another class of cases in which I think this method may be usefully employed to explore the cavity of the tunica vaginalis is where a hydrocele is complicated with an enlarged testis, the enlargement being of a doubtful nature. Thus a man aged about thirty lately came to me as an outpatient. He had a large hydrocele which had been tapped on two occasions; the testis was more than twice its natural size, hard, and somewhat irregular; the cord healthy. The hydrocele, and he thinks also the enlargement of the testis, date back about a year to a strain received in jumping out of a cart. There is no constitutional history whatever. He is anxious to have the hydrocele radically cured. I have delayed this to see the effect of another simple tapping, mercury internally, and strapping to the testis. If after a time the testis remain enlarged, I should consider the hydrocele not one for injection with iodine, but a case suited rather for laying open the tunica vaginalis, after the method which has been described above, so as to explore thoroughly the enlargement of the testis.

Again, in cases of vaginal hydrocele complicated with encysted hydrocele of the testis it may be useful to employ this method. Most surgeons know of cases where, after tapping a vaginal hydrocele, some swelling still remains, usually confined to the neighbourhood of the epididymis, and often yielding, as is well known, a different fluid from that let out from the tunica vaginalis. Tapping and injecting both the vaginal and encysted hydrocele will often result in a permanent cure; but, to my mind, laying open the hydrocele of the tunica vaginalis first, and then incising at the same time and with the same precautions the encysted hydrocele, rather recommends itself, the more especially because the encysted hydrocele is not always single, in which case, if one be incised by the trocar and cannula, the cure will be incomplete—a risk not likely to be run if the hydrocele of the tunica vaginalis be first freely laid open so as to allow of the other being thoroughly explored.

Lastly, I will refer to certain cases of hydrocele complicated with hernia; and having already spoken of congenital hydrocele, I now only mean hydrocele complicated with hernia, in the adult. For the radical cure of such a hydrocele I should always make use of an incision with antiseptic precautions as a means of radical cure, in preference to injecting with iodine. It must be remembered that in these cases the hernia may be, and often is, irreducible; and in addition to the risk of puncturing the bowel with the injecting trocar and cannula (a risk which may of course be avoided by care), there is another risk over which the surgeon has less control—namely, of the inflammation set up by the iodine extending to the sac of the hernia and so to the peritoneal cavity.

Finsbury-square.

[5] Syst. of Surg., vol. v., p. 107.

A CASE OF

RAPID HYPERTROPHY OF THE SPLEEN; EXCISION.

BY H. L. BROWNE,

SURGEON TO THE WEST BROMWICH DISTRICT HOSPITAL.

JAN. 5TH, 1877. — Edmund W——, aged twenty, brass finisher. Was in good health until about six months ago, when he began to get fat. A month after that had swelling of the leg (left), which prevented him from working. He had to lay up in bed. The swelling in the left leg went down, but the abdominal had increased, with more or less variation, up to the present time. Had never suffered from fever or ague; had no history of injury to the side. Had been several voyages to America, and had not suffered from sea-sickness. No personal or family history of syphilis. Now was in bed with great swelling of the abdomen. Both legs anasarcous. Abdomen uniformly dull on percussion, with the exception of the right flank, which was slightly resonant when he turned on his left side. Heart displaced, the apex being level with the aortic valves; its sounds weak, but normal. Breathing intensely laboured; lungs apparently healthy; haggard appearance; no albuminuria; fluctuation very distinct through abdominal walls. Ordered purgatives and diuretics.

7th.—Breathing better; anasarca less; slight resonance in right iliac region; fluctuation less marked.

10th.—Anasarca very much less, and much general improvement; fluctuation absent from the abdomen, which was found to be dull in any position on the left side of the median line, and to have a less marked line of dulness running irregularly down from the sternum to the pubes, two inches to the right of the median line. The fingers could be passed from the right side under the thin edge of a firm tumour which was found to occupy most of the abdominal cavity, and in which there was a large deep notch, marking it evidently as splenic.

14th.—Was put under treatment as follows: quinine and iodide of potassium, ten grains of each three times a day; phosphorus pills night and morning; also iodine ointment to be rubbed all over the abdominal walls twice a day.

He steadily improved in his general health, the tumour remaining the same size, and was able to drive out most days in the last week in January and first in February.

Feb. 12th.—Getting worse. Dulness extending towards the right side.

19th.—Very much worse. Tumour grown two inches in the last week at its lower border. Pain most intense.

Having had all risks most thoroughly explained to him, the patient was admitted into the West Bromwich Hospital on Feb. 21st for operation. Splenotomy was performed on Feb. 23rd. There were no adhesions, nor any pedicle of a distinct kind. Four very large arteries were met with, one after the other, as the spleen was slowly raised out of the abdomen; these were secured by double ligature before division, and also their veins. There was no hæmorrhage. The lad rallied very well from the chloroform, but five hours afterwards died suddenly. There was no hæmorrhage after the operation. The tumour, which was found to be a simple hypertrophy of the spleen, was eighteen and a half pounds in weight.

As to the cause of the hypertrophy I can offer no remark; it must be purely speculative. The lad had leucocythæmia. There were no other glandular affections. The youth of the patient, the almost certainty of a splenic tumour being non-malignant, the absence of other disease, and the fact that the patient was dying, and would have died in a few days, from the pressure alone on the bloodvessels and viscera by the weight of the tumour,—these are some of the strongest reasons why the operation was, and should be, performed.

West Bromwich.

CASE OF POST-PARTUM HÆMORRHAGE, INJECTED WITH PERCHLORIDE OF IRON FOR THE SECOND TIME, COMPLICATED WITH ACUTE PLEURO-PNEUMONIA; RECOVERY.

BY JOHN ADAMS, L.R.C.P. LOND., M.R.C.S., L.M.

J. M——, aged thirty-eight, has had ten children, three prematurely born, some of which were accompanied with large losses of blood; and four years ago, after being confined of a seven months' child, such severe flooding ensued that perchloride of iron was used to arrest the hæmorrhage, after which the patient made a good recovery.

On December 26th, 1875, I was called to see the patient, who was daily expecting to be confined, and found at 5 P.M. she had had several rigors during the afternoon; face flushed; uneasiness and slight pain with respiration. Temperature 101°; pulse 120; respiration 40. At 8 P.M., feverishness had increased; temperature 102°; pulse 126; respiration 40; and at 11 P.M. the temperature rose to 103°. Physical examination of chest discovered no unusual symptoms, and as scarlet fever was within a few houses in a very severe form, it was thought that the patient was suffering from that disease.

Dec. 27th.—Slight friction heard over anterior of right side of chest; moist sounds, with slight consolidation, discovered behind on the same side. Temperature 100°; pulse 116; respiration 36.

28th.—Pulmonary symptoms abated. Temperature 98·8°; pulse 100; respiration 30.

29th.—Temperature again rose to 100° in the morning, with an increase of chest symptoms; the expectoration consisted of thick viscid, rust-coloured mucus. — At 8 P.M. the temperature rose to 102·2°; pulse 112; respiration 40.

30th.—Temperature 102·4°; pulse 130; respiration 42; with pulmonary symptoms much as on the previous day. Although the patient had a considerable increase of temperature, arising from acute pleuro-pneumonia of five days' duration, no uterine action had taken place until the night of the 30th, when labour commenced at 11 P.M., and at 12 30 (midnight) the children was born. Immediately afterwards flooding commenced, which continued after the placenta was removed to a considerable extent. The uterus was found to contract by external pressure, but dilated when left off, and even when fairly contracted, the loss of blood was not entirely stopped. The hand was introduced into the uterus and several large clots were removed, and the uterus injected with cold water, but without the desired effect; about five minutes afterwards this operation was repeated, but with the same result as before. Alarming symptoms having now set in, such as almost failure of heart's action and insensibility, the uterus was injected (having first been cleared of all clots, and syringed with cold water) with equal parts of solution of perchloride of iron and water, with the result of at once stopping the hæmorrhage. About six ounces of the fluid was used.

On the morning of the 31st pulmonary symptoms had abated, and no further uterine loss had taken place, and on Jan. 18th, 1876, the patient was able to leave her bedroom.

Remarks.—The above case presents some unusual features, inasmuch as the patient has apparently been saved from fatal post-partum hæmorrhage on two occasions by the use of perchloride of iron, and in the last instance, at the time of her delivery, was suffering from acute pleuro-pneumonia, with a temperature over 102°. Such a case would not be considered favourable for the use of perchloride of iron, but I cannot help thinking that the manner of using this powerful hæmostatic has in some cases rather to do with the fatal results that have ensued than the agent itself. In the first place, the uterus should be freed of all clots and membranes by introducing the hand, then it should be gently syringed with cold water, so that the iron may act directly on the uterine walls. I would recommend the use of an ordinary brass syringe that would contain about three ounces, with a vaginal tube about eight inches long attached to the end, care being taken that both the syringe and the tube are thoroughly filled with the solution before injecting. The left hand being partly in the uterus, the tube should be guided along its palmar surface up to the fundus, and the fluid injected gently. The syringe can be filled and reintroduced without difficulty if necessary. The hand should not be removed until the operation is completed, so as to allow the fluid injected to freely pass out again. In using a Higgenson syringe, which is generally recommended, — 1st, there is not such control over the force used as with an ordinary syringe; 2ndly, you cannot regulate the quantity of fluid injected accurately; 3rdly, air is more likely to be injected; 4thly, a strong solution of iron may so act on the gutta-percha as to interfere with its action.

Aldersgate-street.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. THOMAS'S HOSPITAL.

IMPERFORATE RECTUM; LITTRE'S OPERATION; DEATH ON THE EIGHTEENTH DAY.

THE following case, which was treated throughout by Mr. Clutton, the resident assistant-surgeon, illustrated very well the difference between imperforate anus and imperforate rectum properly so called. In the former, the anal aperture is either altogether wanting, or merely closed by a membrane of varying degrees of thickness. When the anus is altogether absent, the bowel is usually deficient, and may terminate at any level, although it most commonly ends at the sigmoid flexure. In the latter, the anus and adjoining portion of the rectum for a short distance are natural, but end in a cul-de-sac, while the bowel itself stops at a variable height above it.

A male child four days old, said to be without a lower aperture to its bowel, was taken to the hospital on Jan. 24th, 1877. On examination, the anus was found in its normal position, but it terminated in a cul-de-sac at about one inch from the surface. Mr. Mac Cormac, who was present, handed the case to Mr. Clutton.

The sphincter ani was slit up backwards towards the coccyx, and, although no impulse could be felt when the child cried, it was thought advisable to carry the dissection into the pelvis. After dividing the tough tissue which formed the apex of the anal aperture, the finger easily entered the cavity of the pelvis, and, without having much recourse to the use of the knife, and carefully following the concavity of the sacrum, the promontory was eventually reached. During this dissection, with the most careful examination not the slightest impulse could be felt, although the child was crying forcibly. It was evidently imprudent to carry the dissection higher; a probe was therefore passed into the bladder with the object of more thoroughly exploring the tissues of the pelvis. The probe passed down the urethra and the finger in the wound were in such close contact that it seemed impossible to carry the dissection more forward without wounding the urinary organs; and as the finger was placed upon the sacrum, it was evident that the pelvis was free from intestine in its central line. Mr. Mac Cormac also made a careful examination, and came to the same conclusions.

The risks of any further operative interference, as well as the inevitable result if nothing were done, were described to the child's friends, but they declined to sanction any operation until they had consulted the infant's mother. The child was taken to the hospital on the following day (the 25th.) The abdomen was found still more distended, but there had been no sickness, which was probably due to the fact that no nourishment had been given.

After the thorough search that had been made on the previous day for the rectum in the pelvis, it was not thought

advisable to reopen the wound. An artificial anus was made in the left inguinal region after Littré's method.

There was a profuse discharge of meconium throughout the night of the 26th, but towards the following morning the fæces became yellow, while the abdomen was less distended and quite flaccid to the touch. The child took milk well from the bottle.

On the 27th it was going on well, but was slightly costive, and there was a tendency to sickness.

On the 29th the bowels acted thoroughly without medicine. The slight tendency to sickness had stopped. There was no tenderness of abdomen. The child had aphthæ badly.

On the 30th all the stitches were taken out, and a poultice was applied to the wound as it looked rather inflamed. There was no sickness and no tenderness of abdomen.

On Feb. 3rd the child seemed to be getting thinner and thinner. There were no signs of peritonitis. But from this date the child gradually faded away, its skin at the last hanging in folds around its limbs. Reduced to the most extreme degree of emaciation, it died on Feb. 12th, eighteen days after the operation, and on the twenty-first day of its life.

Post-mortem examination.—The artificial anus in the left groin communicated with the sigmoid flexure. There was no disease of any organ, and no trace of peritonitis. The large intestine occupied the normal position in the abdominal cavity. The rectum was found in the pelvis containing fæces, displaced slightly to the left, but passing down to within an inch and a half of the natural anus. There was no trace of any fibrous cord uniting the anal cul-de-sac with the termination of the rectum. This had, no doubt, been divided in the first operation.

Remarks.—How the rectum escaped discovery in the dissection that was carried high up in the pelvis, it is difficult to say. Too great fear of injuring the bladder probably led to the dissection being carried too far back towards the sacrum, and, pushing aside the structures with the forefinger, instead of dividing them with the knife, displaced the rectum from off the sacrum. But, on the other hand, it can scarcely be questioned that the rectum was empty at the time of the first operation, or it could not have been missed. It would have been well to have explored the pelvis a second time before proceeding to colotomy; for in the interval of a day the meconium might have descended lower and formed a tumour easily recognisable in the pelvis. In any future discussion of the question of performing colotomy in cases of this kind, an argument might fairly be derived from this and other instances in which the rectum has been similarly missed and colotomy afterwards performed. A probe might subsequently have been passed down from the opening in the groin, and made to present in the natural position of the anus (as was, indeed, contemplated had the child lived), and the deformity thus remedied. In this instance, the child can hardly be said to have died directly from the operation, but rather from a marasmic condition, which often accompanies this congenital deformity.

CHELSEA HOSPITAL FOR WOMEN.

OVARIOTOMY; LACERATION OF THE BOWEL; RECOVERY.

(Under the care of Mr. THOMAS CHAMBERS.)

MRS. G——, aged thirty-seven, married thirteen years, had had five children at full term; no abortion or miscarriage. The youngest child was born in May, 1874. In March, 1875, the child being still at the breast, she had "a very severe attack of inflammation of the bowels," which placed her life in great risk, and kept her in her room several weeks. During this illness she noticed for the first time a "swelling immediately over the bladder," which was exceedingly painful when manipulated, and which from this time continued steadily to increase. Her medical attendant was of opinion that there was extra-uterine fœtation with a fibrous tumour. In November, 1875, she consulted two other medical men, who agreed that she was pregnant, and advised her to return home and to keep quiet. On several grounds these opinions were held to be not satisfactory, but chiefly because she had not cohabited with her husband since the previous Christmas (1874). In December, 1875, she was informed by a "tumour doctor" that she had a "fibrous tumour."

She was admitted into hospital on March 8th, 1876. Her face was long and careworn, and the cellular tissue about the neck and breasts almost absorbed. The abdomen was much enlarged, having a hard irregular growth immediately in the centre, surrounded by a large quantity of ascitic fluid. The measurements were 44 inches immediately below the umbilicus, and 17 inches from ensiform to pubis. Percussion sounds were clear between the upper margin of the tumour and the ensiform; perfectly dull, however, in both loins when the patient was on her back, but clear when she moved from side to side; but the position of the body did not in any way change the percussion-note of the central tumour. On examination per vaginam, a large unyielding body was found resting on the brim of the pelvis, behind which the uterus was pressed against the spine. The sound passed, with some difficulty, three inches and a half. Menstruation had been regular as to periodicity since the previous March (when suckling was discontinued), but very irregular as to quantity and duration, lasting often six or eight days, always attended with great pain, and often with urgent vomiting, continuing the greater part of the period.

The case was judged to be one of multiple ovarian tumour with an excess of ascitic fluid. The nature of the disease having been explained to her, she expressed herself as not only willing but most anxious to submit to any operation which might be deemed necessary. On the 12th menstruation came on and continued for five days, with great pain associated with constant vomiting. On the 16th, while vomiting urgently, the patient thought she felt something give way in her abdomen, but as no unfavourable symptoms supervened, such as are usually supposed to arise under such circumstances, the idea of a cyst having ruptured was abandoned, notwithstanding the fact that from this time the general contour of the abdomen was greatly changed. The central hardness decreased considerably, while the lateral distensions were proportionally increased, so that the central prominence was no longer perceptible to the eye.

On March 23rd, assisted by Drs. Barnes and Aveling, Mr. Chambers commenced the operation by an incision of five inches from the umbilicus downwards. When the peritoneum was opened there was a tremendous gush of dark, thick, and offensive fluid. At first it was supposed that the cyst, having closely adhered to the anterior abdominal wall, had been opened by mistake, but on introducing the finger, the tumour could easily be felt. The opening was enlarged, and all the abdominal fluid allowed to escape. The omentum was exceedingly vascular and extensively adherent to the anterior surface of the tumour; a fold of small intestine, about six inches in length, was closely embedded in a deep cavity formed by two diverging outgrowths on the under surface of the tumour, and much time, patience, and care were necessary to separate this adhesion. This being accomplished (chiefly by the thumb-nail), and there being no other adhesions, the tumour was readily removed and the pedicle secured in a Wells's clamp. A considerable time was necessary to secure all the bleeding points in the omentum, but when this was completed and the pelvic cavity carefully sponged out, preparations were made for closing the wound, when blood was observed to be welling up among the intestinal folds. Careful search was made for the bleeding point. The omentum was examined, but without success. The fold of intestine which had been separated from the tumour was next examined, and a longitudinal rent of more than two inches was found, from the divided edges of which blood was freely oozing. A director was passed into the wound, which clearly indicated its nature and extent. While the director was thus retained, a continuous suture of catgut was passed loosely from side to side and from below upwards. The director kept the edges apart, so that the needle could be passed accurately, and it prevented any injury to the opposite surface of the bowel. When the upper angle of the wound was reached, the director was withdrawn and the suture steadily tightened until the edges were accurately adapted. The catgut was knotted and cut off short. This little operation completely arrested the hæmorrhage. After waiting a short time, and there being no further bleeding, the pelvic cavity was again sponged out and the injured bowel carefully returned, the wound closed, and the patient put to bed.

She was under chloroform an hour and forty-five minutes.

Lister's antiseptic spray was in use during the operation. Chloroform vomiting was very severe for twenty-four hours. Half a grain of morphia was now injected into the upper part of the thigh, which had the effect of arresting not only vomiting but nausea at once. The effect was prompt and satisfactory. The injection was repeated every six or eight hours during the first week, when it was discontinued. There were no abdominal pains or tenderness of any importance during the whole of the after-treatment, notwithstanding the high temperature (which ranged from 102° to 104° F. for the first six days), and the unsteady pulse (110 to 130). After the sixth day the temperature and pulse both began to fall; food could be taken, and rest was procured by morphia when necessary. The sutures were removed on the eighth day. On withdrawing the one immediately above the pedicle a large quantity of very offensive matter escaped. At first it was believed that this escape was from the abdominal cavity, the result probably of suppuration at the injured portion of the intestine. This idea was supported by the offensive character of the discharge. A careful examination, however, showed that such was not the case, but that it was the effect of suppuration in the abdominal wall. So offensive, indeed, was the smell that the wound had to be dressed with charcoal for a fortnight. It is worthy of remark that this large and offensive accumulation of matter had taken place without any of the ordinary indications of suppuration—viz., shivering, pain, redness, throbbing, &c., at a time, too, when the pulse and temperature were both subsiding. On the ninth day the bowels were relieved without pain; from this time they acted regularly, aided occasionally by a simple aperient. On the tenth day the clamp was taken off; on the fifteenth day the slough came away, and from this date the wound healed rapidly and well. She left the hospital on the thirty-fifth day after the operation.

On the forty-ninth day after the operation she had a severe attack of pain in the lower part of the abdomen (right side), which lasted several hours, for the relief of which she took, amongst other remedies, a little castor oil. In a few hours the bowels were relieved, when she passed "a long white thing thicker than her finger; it looked like a cream cheese made in a mould." It is probable that this body was a fibrous cast of the injured bowel. She had had nothing of the kind afterwards, and on July 1st was perfectly well.

Remarks. — There are two or three points in this case worthy of notice. First, the early history and the difficulty in diagnosis are noteworthy because of their importance, and of the indications of care and caution which they suggest. Secondly, that the sudden change in the general contour of the abdomen which took place during the severe vomiting, associated with the menstrual period immediately preceding the operation, was due to the rupture of a cyst, was clearly ascertained after the operation; yet there were neither physical nor objective signs of peritonitis, if we except the general vascularity of the abdominal contents—a condition often present where no such accident has happened. Thirdly, the adherent intestine was separated with the greatest care, yet the rupture was not observed; and had it not been for the after-hæmorrhage, which necessitated a minute examination, it would not have been noticed, and the abdomen would have been closed with the rupture undiscovered. It is thus more than probable the patient would have died from peritonitis caused by the escape of the bowel contents into the peritoneal cavity. These considerations are suggestive of special care when engaged in complex cases. And, fourthly, it is not less noteworthy that an abscess of such proportions as the one observed in this case should be formed in the abdominal wall without a single indication of its presence. That small accumulations of pus may take place in the abdominal wall without much disturbance is the often-repeated experience of practical men; but that an abscess of such proportions as the one in question should form and mature without a sign or symptom is, Mr. Chambers states, beyond his experience, notwithstanding he has operated over fifty times himself, and has been a chief assistant in more than a hundred and fifty ovariotomies with other operators.

Mr. Chambers states that since this operation he has assisted Dr. Barnes in a case where he had the misfortune to cut the bowel while extending the abdominal opening; the wound was closed with catgut, as in the above case, with results equally satisfactory. These cases would indicate that injury to the bowel in ovariotomy is not so formidable an accident as has hitherto been supposed.

NORTH STAFFORDSHIRE INFIRMARY.

FRACTURE OF THE BASE OF THE SKULL; WOUND OF LATERAL SINUS.

(Under the care of Mr. SPANTON.)

THE following case is important from a medico-legal point of view from the time that elapsed between the occurrence of the accident and the appearance of the symptoms.

J. H——, aged thirty, fell backwards off a ladder at 8 P.M. on July 7th; the height was about twenty-five feet, and the ground rather soft. It is uncertain whether he was stunned by the fall or not, but in a few minutes he was able to walk home. The following day, being Sunday, he did not work, but made no complaint, except of a slight pain at the back of the head. This was the only symptom until the morning of the 9th, when he was noticed to be very restless, alternately going upstairs and lying on the bed and coming down again; he seemed nervous, and said to his wife that he hoped he should get better. At 11 A.M. he gradually became unconscious.

When admitted at 5.30 P.M. he lay with his eyes closed; there was no reflex movement on touching conjunctiva; the pupils were natural, and acted freely. He took no notice when shouted to or shaken. Respiration natural; pulse weak, about 56 per minute, but varying somewhat in rapidity; temperature 99·6°. At intervals he uttered a very low moan, and there were frequent purposeless movements of both arms. There was a superficial scalp-wound a little to the left of the occipital protuberance an inch in length; the integuments in the neighbourhood did not appear to be contused. When an attempt was made to feed him he at first clenched his teeth, but the fluid once in the mouth swallowing occurred readily. The head was shaved, ice applied, and a blister placed behind each ear; a powder, composed of five grains of calomel and fifteen of jalap powder, was administered. He moaned a good deal through the night. Bowels acted slightly.

On the 10th, at 10 A.M., bowels acted freely. Pulse very weak, varying from 60 to 72 per minute. He moved the right arm up and down, and occasionally drew his legs up and straightened them out with a jerk. At 3 P.M. he had wet cupping at nape of neck to four ounces.

On the 11th the condition was the same, but the pulse was weaker. A 1 P.M. respiration became slower, and at 3 P.M. the patient died, death being preceded by slight muscular twitching of the limbs. The temperature varied from 100·8° to 101·8°.

Autopsy, twenty four hours after death.—The scalp in the neighbourhood of the wound was contused on its deep surface, the bone being natural. There was lymph over the upper surface of both hemispheres in the meshes of the pia mater. The anterior extremity of left anterior lobe was contused to the depth of a quarter of an inch. There was also bruising of the posterior extremities of both posterior lobes. The brain was in other respects natural. In each posterior fossa of the base of the skull the dura mater was separated from the bone by clotted blood. Running backwards from the posterior margin of the foramen magnum, a little to the left of the median line, was a fracture; it crossed the left lateral sinus an inch from the torcula Herophili, and ascended about an inch and a half further.

BEQUESTS, &C., TO MEDICAL CHARITIES. — Mr. John Johnson, of Knighton, bequeathed £100 to the General Infirmary, Nottingham. The Sheffield Public Hospital and Dispensary has received £200 under the will of Mr. Geo. Wolstenholm, and £50 under that of Mr. John Bower Brown. The Duke of Norfolk has given £100 to the Westminster Hospital reparation fund. The Rev. Arthur Pakenham has given £200, in memory of his late brother, to the Convalescent Home, Belfast; and Lady Johnson a donation of £500 towards the cost of furnishing that institution.

Reviews and Notices of Books.

Guy's Hospital Reports Edited by H. G. HOWSE, M.S., and FREDERICK TAYLOR, M.D. Third Series. Vol. XXII. London: J. and A. Churchill. 1877.

IT will, we think, be generally conceded that the present volume of Guy's Reports is one of the most valuable as it is certainly the most readable of many that have been published of late years. Not that there had been any falling off in the contributions of the talented staff, but, owing possibly to the subjects chosen or the greater tendency to prolixity that for a time seemed to prevail, there was much in the issues of later years which rendered them less useful to the busy student than some of the earlier volumes. We are glad, then, to find again within these pages matter that is thoroughly sound, practical, and suggestive, the whole forming a most creditable contribution to our literature.

We may first notice a paper contributed by Dr. Wilks—whose reappearance as a contributor to these Reports will be gladly hailed—upon Cerebritis, Hysteria, and Bulbar Paralysis, as illustrative of Arrest of Function of the Cerebro-spinal Centres. To say that it is characteristic of its author is saying much, but it embodies a large amount of truth and deals with the subject in a wide philosophical manner. As points worthy of notice may be instanced the passages in which Dr. Wilks holds up to ridicule the idea that in cerebritis there is exaltation of function, and comments upon the absurdity of such a question being put as that requiring the distinction between delirium tremens and cerebritis. The section devoted to hysteria is very worthy of study, and highly suggestive. He points out, truly enough, that there is no disease of the cerebro-spinal centres, having an organic cause, which may not be simulated by a functional one; and his comparison of those cases of hysteria which are accompanied by profound torpor and inability of movement with the condition of sleep is very apt. He gives some good cases of hysterical hemiplegia and hemianæsthesia, and comments at length upon the latter condition.

A brief but practical paper by Mr. Edward Cock opens the volume, dealing with the important question of prognosis based upon the seat and characters of primary syphilitic sores. Mr. Cock tells us that during a period of nearly fifty years he has recorded some thousand cases of syphilis, so that his conclusions upon this subject must of necessity be regarded with respect. Dr. Savage deals with the question of Inheritance and Mental Disease in a paper which affords strong confirmation of the prevailing views on this subject. Dr. Pye-Smith has compiled from various sources all that is known concerning the curious skin affection, xanthelasma, and presents the results of his research in a concise and lucidly-written article. A more original production, and, in some respects, a better paper, by the same author, is that entitled "Some Remarks on the Classification and Local Distribution of Disease, and particularly of Diseases of the Skin." He justly satirises "mixed classifications," and points out that a correct nosology should proceed upon single lines, such as upon anatomical characters, upon symptomatology, and upon etiology, although want of knowledge must obviously limit any attempt at a perfect classification of diseases, just as in biology. After dealing with a few rare forms of dermatitis, he concludes his paper by presenting diseases of the skin under six different forms of classification—viz., 1, as physiological processes; 2, etiological; 3, therapeutical; 4, as regarded in their subjective effect; 5, as anatomical conditions of certain layers, organs, or regions; and 6, as affecting different ages. Dr. Goodhart contributes an exhaustive paper on Empyema and its Treatment, based upon cases occurring at Guy's Hospital since 1866, and at the Evelina Hospital since its foundation in 1869. The question of treatment is dealt with very fully, and Dr. Goodhart, although recognising that there are a few cases which may be safely let alone, gives in his adhesion to operation by a single free opening, with antiseptic measures, and with a large drainage-tube, as being the most effectual means of effecting a cure. He insists upon the necessity of making the opening as low as possible, fixing the point at the ninth intercostal space opposite to the angle of the rib, the seventh space in the axilla, or the eighth between the axilla and the rib-angle. Further back there is risk of wounding the lung compressed against the spine, and below these points the peritoneal cavity may be entered. A large number of cases are given with full details. Dr. Habershon discusses the question of the Diagnosis of Diseases of the Cæcum, with several illustrative cases. Dr. Hilton Fagge and Mr. Lamb write upon Diphtheria and Croup, analysing a large number of cases, and arriving at the following cautious conclusions:—

"We find that the attempt to separate from diphtheria a membranous croup in which the fauces remain entirely free from false membrane is beset with difficulties. The cases (which must, then, be called cases of diphtheria) in which the air-passages are attacked, the palate and tonsils being but slightly affected, occur almost exclusively in children, and they are seldom, if ever, infectious, whereas pharyngeal diphtheria is highly infectious. But when one has once admitted that the different forms of diphtheria present different degrees of infectiousness, and that each of them occurs with special frequency at a particular period of life, one is debarred from insisting on the sporadic character of membranous laryngitis, and the fact that it never arises in the wards of a general hospital, as proof that it is distinct. It is otherwise if we ..... allow that the non-specific, simply inflammatory, affection may be attended with the formation of false membranes, even in the fauces. Such a view does away with the very improbable supposition that laryngeal diphtheria differs from the ordinary form of the disease in being peculiar to children, and in possessing little or no infectiousness, and I think commends itself to us on other grounds also."

Dr. Goodhart and Dr. Frederick Taylor undertake to confute Dr. Dickinson's statements upon the condition of the nervous centres in diabetes, and they give the results of the examination of nine cases of this affection. The changes described by Dr. Dickinson were not constantly present, and when present did not exhibit any evidence of being other than artificial, or due to post-mortem change. Mr. Bryant continues his papers on surgical subjects, with one on Tumours of Bone; Dr. Golding Bird gives a succinct account of two cases of Subcutaneous Osteotomy of the Neck of the Femur; Dr. Stevenson writes on Acute Poisoning by Phosphorus; Dr. Stokoe on the Use and Administration of Sedatives; Mr. Howse on the Cure of Varices by Excision; and Mr. Higgens on the Causes of Preventable Blindness.

But to our thinking the gem of these reports is the simple "historical note" in the middle of the volume, in which Dr. Wilks sums up the labours of the three eminent Guy's physicians, whose names have come down to posterity each associated with one distinguishing example of their clinical acumen—Bright, Addison, and Hodgkin. We have referred to this portion of the Reports last, but it was the first we turned to read; for it forms, without a doubt, the most marked feature of the book.

Traité d'Hygiène Navale. Par J. B. FONSSAGRIVES, Médecin-en-Chef de la Marine, &c. Deuxième Edition. Paris: J. B. Baillière et Fils. 1877.

THE book now before us is a portly volume of some 900 pages, and we venture at once to record, to our own humiliation, that no other treatise on naval hygiene exists

either in England or elsewhere half so instructive, exhaustive, or systematic. The author divides his work into eight parts, relating severally to the construction of ships, the sailor, climate, ventilation, the sea, accidents, diseases, regimen, and what may be classed as moral influences. The first section, relating to ship construction, contains a variety of sectional sketches; and that on ventilation includes, as we believe, drawings of nearly all varieties of fans and cowls, both on the plenum and exhaust principles, used afloat. Diving dresses of all kinds are explained and illustrated, as well as many varieties of apparatus that can be used in operating in foul atmospheres. The author commences his chapter on sickness afloat by designating typhus, scurvy, beri-beri, night-blindness, and constipation as eminently marine maladies. But this section is perhaps weaker than the others, and few particulars are given with which our own naval surgeons are not already familiar. We commend this book to the earnest attention of all interested in sanitary science afloat, because the details as to ventilation, ship construction, floating hospitals, transports, diet, and many other points, are so carefully collected and so very cleverly epitomised. It is, in fact, a book that should be in the hands of all naval medical officers as well as port medical officers of health.

OUR LIBRARY TABLE.

Rivista Sperimentale di Freniatria e di Medicina Legale Edited by Prof. CARLO LIVI.—We have received the First Fasciculus of the third volume of this review. It contains a good article by the editor, on the Etiology of Progressive Paralysis. He finds from a comparison of a large number of reported cases that the decade in which the disease occurs with greatest frequency is from 41 to 50; that it attacks males rather than females in the proportion of 7 or 8 to 1; that heredity does not play a very important part in its development; and that it is most commonly seen in those of a "venoso-bilious" temperament. Of 252 cases, 170 resulted from physical lesions, 82 from moral causes. Amongst occasional causes, he includes venereal and alcoholic excesses, syphilis, insolation, and cardiac affections. A second paper by Prof. Aug. Tamburini treats of Osteomata of the Spinal Arachnoid in Progressive Paralysis. There is also a long memoir on the Value of the Physician in Medico-legal Investigations, by Prof. Antonio Rafaelle, and a Medico-legal Study of Carlino Grandi, who murdered four children and attempted to murder a fifth.

On the Science of Weighing and Measuring Standards of Measure and Length. By H. W. CHISHOLM, Warden of the Standards. (Nature Series.) Macmillan and Co. 1877.—The great national importance of fixing and preserving standard weights and measures has been recognised in all civilised countries from ancient Egypt downwards. The interesting little volume before us is devoted mainly to a history of the standards of ancient and modern times, especially those of our own country. No one who had not studied the subject could imagine the enormous labour, the skill, and knowledge, or the expense involved in the fixation and comparison of these standards. Thus, we are told, with regard to the standard yard legalised in 1855, that "the number of micrometer readings for all the comparisons exceeded 200,000. Amongst the operations, also, it was found necessary to construct an entirely new system of thermometers." Perhaps the last section, on "Weighing and Measuring Instruments, and their Scientific Use," will be the most practically valuable to scientific men, but every part of the book is useful and instructive.

The Monthly Microscopical Journal. Edited by HENRY LAWSON. No. CIV., August. London: Hardwicke & Co.—This part contains: 1. A Device for the Illumination of Balsam-mounted Objects, examined with Immersion Objectives having a "balsam angle" of 90° and upwards. 2. An Essay on the Classification of the Diatomaceæ; by M. Paul Petit. 3. A new Paraboloid Illuminator; by Jas. Edmunds, M.D. 4. The Development of the Ovum: a review of Bütschli's work on the Earliest Developmental Process of the Ovum; by W. H. Dallinger and J. Drysdale. 5. German Methods in Histology and Embryology; by Charles Sedgwick Minot.

REPORT OF THE COMMISSIONER OF POLICE OF THE METROPOLIS FOR 1876.

WE have so frequently borne testimony to the excellence of these reports, both with regard to the important information they afford and the manner in which the various details are arranged, that we need not again dwell on this part of the subject beyond saying that the report of the present year is noway behind its predecessors in interest and lucidity, but will pass on to a review of the points of special interest. With regard to the offence of "drunkenness" among the population, it is not satisfactory to note that "the average of the last six years has been higher than that of the preceding ten." Colonel Henderson would explain that increase by the "increased activity of the police under recent legislation," but we suspect the increased facilities for obtaining drink, especially spirits, at the grocers' shops is the true explanation. Over 3000 persons suffering from accidents and other causes were conveyed to hospitals by the police. This statement shows the amount of work cast upon those institutions, and, as these cases are attended gratuitously, a great burden is taken off the municipal authorities. The number of persons killed in the streets were a third more than in the preceding year! The exact numbers are 87 for 1875 and 130 for the present year. This unnecessary slaughter is still allowed to continue unchecked, and the authorities are much to blame that no attempt has been yet made to erect bridges or form subways at suitable distances in the most crowded thoroughfares. We readily acknowledge the efficiency of the police in regulating the traffic as far as their powers go, but numerically they are unable to cope with dense traffic at certain points in the busy season of the year. The great cause of street accidents we are assured is the frequent blocking up of thoroughfares without giving due notice. A driver finding his way blocked often attempts to make up for the detour he has to take by furious driving, and that too often through narrow bye-streets and lanes. The danger as well as immense inconvenience would be obviated if a map, after the fashion of a "weather chart," were issued, say fortnightly, under the supervision of the police, showing what thoroughfares were under repair, and those that would be again opened during that period. A driver would then have an opportunity of considering his route, and would escape the perplexity of entanglement in labyrinthine back streets. The number of stray dogs seized in the streets continues about the same. We wish the same power of seizure were extended to stray cats, and that these starving and frequently diseased animals were not permitted to rove the streets. At all events we think the police might have instructions to break up the nocturnal parties of these noisy revellers, and compel them to "move on." Householders still continue careless of the protection of their property, no less than 8530 windows and 16,767 doors being found open or insecurely fastened. Colonel Henderson protests against this negligence as a direct encouragement to crime; but, bar and bolt our windows and doors as we may, we have no protection against the "unauthorised visitor" who steals our umbrellas, coats, hats, and sideboard ornaments. The area-sneak is permitted to ring the bell, and engage our servants in a nefarious traffic for bottles, rags, grease, and oftentimes things of higher value, whilst his colleague walks off with the plate-basket. The gentlemanly commission-agent takes our best umbrella or new hat, and we have no power to prevent his visits. It ought to be made illegal for such gentry to call

and solicit custom at private houses, and, if this were the case, much of the petty theft that is carried on systematically in London would be suppressed. It is satisfactory to notice that the general conduct of the men during the year has been exceedingly good. The Common Lodging-houses Act continues to be worked satisfactorily by the police, and the registered houses are increasing in number and improving in condition; notwithstanding the prevalence of small-pox in the metropolis last year, the number of cases of infectious and contagious disease removed from the lodging-house is comparatively small. The report, as far as the police themselves are concerned, is highly satisfactory, but the condition of things it reveals and the little progress that has been made in combating crime and drunkenness, are greatly to be deplored.

THE PLAGUE.

NOTWITHSTANDING the momentous issues of the war now in progress, the appearance and continued prevalence of plague on the confines of Europe have engaged the anxious attention of the two belligerent powers, and there is reason to believe of others of the great continental powers also. Partly from interruption of communication with the seat of the disease in the East, and partly from the pre-occupation of news-writers with the events of the war, it has been difficult to gather a connected account of the course of plague in the tract of country lying between the southern coast of the Caspian and the head of the Persian Gulf during the present year. Information recently received permits us now, however, to give an approximately accurate history of the disease from its cessation in Mesopotamia in the summer of 1876 to the present time.

In 1875-76 plague underwent so great a development in Mesopotamia as to give rise to the gravest anxiety with regard to the future progress of the malady should it reappear in the present year. Not only did it show itself with undiminished fatality over a greater area of country than at any time since the beginning of the outbreak in 1873, but, passing the south-eastern frontier of the country, it invaded Persia, causing a fatal outbreak at Shuster and in the district surrounding that town. The history of the outbreak in Mesopotamia to the beginning of 1876 has been given in detail in an official memorandum by Mr. Netten Radcliffe on the recent progress of Levantine Plague, published in the report of the Medical Officer of the Local Government Board for 1875; and we may express here a hope, in the interest of epidemiology, that the subsequent history will be given officially in like detail. For the reappearance of plague, after its apparent extinction, is unquestionably the most remarkable epidemiological phenomenon which has occurred in the present generation. The loss of life from plague in Mesopotamia in 1875-76 has been variously estimated. The fact appears to be that a general estimate must be the merest guess-work. Any certain knowledge of the extent of prevalence and mortality from the disease was of necessity, from the small number of the Ottoman sanitary staff in the province, confined to a few of the principal centres of population. In Bagdad over three thousand deaths are stated to have been recorded, in Hillah and the neighbouring villages twice this number. Hardly a village and town lying between the Tigris on the east and the border of the Great Syrian desert on the west, and Bagdad on the north and the junction of the Shat-el-Hai with the Euphrates on the south, escaped the disease. The Ottoman sanitary department in Bagdad put down the total loss of life within this tract of country at a minimum of 20,000—a reasonable estimate, as would seem, if the disease were as fatal in other centres of population as in Bagdad and Hillah. The greater diffusiveness of the disease in 1875-76, together with its having, for the first time since its re-appearance in 1873, shown itself at Bagdad, gave rise to the fear that should plague break out again this year it might exhibit itself in still more formidable proportions. This fear has been in part realised. Plague broke out again in Mesopotamia early in the year, and it would appear to have prevailed more or less in all the localities in which it had shown itself the previous year. But within this area of prevalence it does not seem to have been either as diffusive or as fatal as in 1876. Bagdad again suffered, but the total loss of life from plague there is set down at little more than one-half that which occurred the previous year. Indeed, the information that we have as to this year's outbreak in Mesopotamia would lead to the inference that the outbreak there is becoming exhausted, and but for the appearance of the disease on the borders of the Caspian, danger to surrounding countries and to Europe from this source might be looked upon for the moment as very remote, if not at an end.

The appearance, however, of plague at Resht and in other parts of the province of Ghilan wholly forbids so pleasant an assumption, and proves that the danger of a reappearance of plague in Europe is more imminent than had previously been conceived. Whether the outbreak of plague in Ghilan is an offshoot of the outbreak in Mesopotamia or not, the information at present accessible does not show. In Constantinople the disease is believed to have been carried to Resht from the banks of the Tigris, and from Resht disseminated in Ghilan. Upon what evidence this belief in the Mesopotamian origin of the disease in that province rests we do not know. It is now certain that plague was first recognised in Resht in May, and that from that time to the present it has never been absent from the town and surrounding district. Just as in the early history of the malady during its recent outbreak in Mesopotamia, so also here, while presenting all its characteristic symptoms and proving very fatal, the disease has not to the present shown much diffusiveness. In Ghilan, however, the disease manifests no disposition to die out with the setting in of hot weather, as in Mesopotamia, and it appears as if it would continue gradually to increase in prevalence throughout the year. No returns seem to have been published of the numbers of cases and deaths which have occurred even in Resht, and it is probable that there is much concealment of the actual facts of the case. Russia is profoundly alarmed for the safety of the Caucasus and of Astracan; indeed, it has been already rumoured that cases of plague had occurred in the district adjacent to Baku. Intercourse between the last-named port and the port of Astracan and Enzelli has been stopped, and sanitary cordons have been placed on the routes from Ghilan into Transcaucasia. Moreover, a Russian medical commission has been sent to Resht to investigate the disease and its movements, and to aid the Persian Government, if this be possible, in arresting its prevalence. Turkey has, moreover, through its General Board of Health, been giving much attention to the subject, but obviously, in the present state of affairs in Armenia, it cannot protect itself or help, even in appearance, to protect others. By the withdrawal of the regular troops from the province of Bagdad, and from the present disturbed state of the Kurdish frontier, even the *quasi*-precaution of putting in force quarantine on the Persian frontier cannot well be adopted.

THE WAR.

RIGHTLY to understand the admirable design and arrangements for the drafting of the Russian wounded as rapidly as possible into the interior of the empire, and so relieving the hospitals at the front, the present distribution of the wounded who have been thus drafted should be studied on the map. The *Journal de St. Petersbourg* for the 18th August quotes from the *Medical Gazette* a return which shows that at that time 1329 wounded had been distributed in hospitals in the following cities and towns in the numbers stated:—Kiev 150, Voronege 135, Orel 170, Kursk 115, Kharkov 115, Rovno 90, Neijine 154, Moscow 400. Since this return was made the sanitary train of the Princess Eugenie Maximilianovna has carried 262 sick and wounded to Kiev, of whom 21 have been placed at Bykovetz, 52 at Rakbay, and the remainder in the Kiev hospitals.

The Russian Red Cross Society has published a report of the various articles which have been despatched from its central depôt to the army. These include 69,000 bandages, compresses, &c., for surgical dressing, 36,000 articles of

underclothing, 1700 surgical instruments, 5000 articles of pharmacy, 2520 lb. of medicaments, 27,000 articles of bedding, 85 litters, 100 crutches, 6000 articles of cooking apparatus and hospital vessels, and large quantities of tea, coffee, wine, conserves, tobacco, soap, &c.

We referred a short time ago to the apparently astonishing inconsistency between the elaborate care given to make provision for the relief of the sick and wounded of the Russian army, and the indifference to the sanitary hygiene of the camps. The special correspondent of *The Times*, writing from Plevna under date the 15th August, specially notes that the surgeons-in-chief of the Russian army "do not pay sufficient attention to the sanitary condition of the camps." In fact, it is the old story, that the medical staff is made responsible for the care of the sick and wounded alone, and that they have no function of preventing disease. Indeed, it would seem as if the prevention of disease and the feeding of the Russian army were left pretty much to chance. The correspondent above referred to describes a state of things with reference to the transport of food and forage during the recent rains in the occupied district which proves that this essential part of the military organisation is under no systematic and intelligent control. The transport trains, he observed, were without officers, no attempts were made to remove easily remedied difficulties of broken and sodden roads, and they were overcome, if overcome, by mere exercise of brute force, regardless of delay and the needless expenditure of horseflesh. Carcasses of horses and cattle were left uncovered on the roadside where they had fallen, the decomposing bodies filling the air with offensive and dangerous effluvia. In like manner the camps showed that there was no proper supervision with regard to cleanliness and arrangement. "It only needs," observes *The Times* correspondent, "the starting of some epidemic to sweep the Russian soldiers away like leaves in autumn, in consequence of the poisoned air of the roads and camps."

A telegram from Andrianople, dated August 24th, announces the painful news of the death of Dr. Meyrick, of the National Aid Society, from dysentery. He could not have been long with the Turkish troops at the front, and we fear that the excessive overwork to which he must have been subjected has contributed not a little to intensifying the results, unhappily fatal, of exposure and bad food. It is early days for fatal dysentery to begin to show itself among the Turkish forces, and the occurrence is significant of what the autumn will bring forth among them.

The Times of the 27th of August contained a copy of an official telegram sent by her Majesty's ambassador at Constantinople to Lord Derby, and which contained the information that the Grand Vizier had given orders for the distribution among the Turkish troops of a translation in Turkish of the Geneva Convention, in order that violation of its rules, which in some instances may have happened through ignorance, shall not be repeated. This is rather late in the day for Turkish officers and troops to be made acquainted with a convention of which the Porte was one of the assenting parties years ago. However, the old adage is certainly here appropriate, "better late than never."

Lord Blantyre's medical staff consists of ten surgeons. Of these four (Dr. J. H. Casson, C. Featherstonhaugh, Buckley, and Guppy) have been despatched to Erzeroum, four (Drs. C. L. Wattie, A. R. Busby, Boyd, and Wellington Lake) to the Shumla district, and are attached to Redzid Pasha's division, and two (Dr. A. A. Woods and Gilbert Kirker) to Adrianople. Drs. Casson and Featherhaugh reached Erzeroum on the 12th July, and commenced work amongst the wounded on Sunday morning the 15th July. Lord Blantyre has favoured us with the following interesting extracts from letters received from these gentlemen.

Dr. Featherstonhaugh wrote:—"Erzeroum, July 17th: We were appointed to take charge of a khan turned into a temporary hospital having room for about 200 men. We found them in a very bad state. Most of the wounds had been received about four weeks ago, and scarcely anything had been done for them. Some bullets were left unextracted; fingers, hands, and feet which should have been amputated were uncared for. Some of the men begged us to amputate their legs or arms as they needed, but to-day we are prevented doing so by the principal medical officer here. We hope by the aid of Mr. Zohrab (Consul) to gain independent action, if not we will be greatly harassed by having to refuse the poor soldier what we know is the only chance of saving his life. We have done some minor operations, and had to postpone others till we can obtain leave from ——, when I hope it will not be too late. A few soldiers object to amputation of even a finger, but I really think they are the exceptions. You can hardly imagine all the thanks and blessings we have received for the little we have done during the last three days. Up to the present, besides opening abscesses, &c., Dr. Casson has taken off a hand and a thumb. I have extracted three bullets and removed two fingers. We find the greatest benefit from dressing the wounds with carbolic acid lotion; one could hardly imagine it would do so much good in three days. The hypodermic injection of morphia for relieving pain also is most useful; the soldiers now cry out for the needle as the only thing that does them good, and gives them the chance of a night's rest. Our khan is a two-storey building, and contains a number of rooms, some very well lighted and ventilated, others quite the contrary, but on the whole a favourable place for a hospital ..... We have no bedsteads, but will get them as soon as possible, either from the Government or pay for them with some of the funds we have ..... We cannot thank Mr. Zohrab too much for the great trouble he has taken for us, and we hope by his aid to make our hospital a credit both to you and ourselves, and an example to the Turkish authorities. ..... P.S. Since I wrote the above Dr. Casson obtained leave, and successfully amputated two legs just below the knee."

Dr. Casson wrote:—"Erzeroum, 22nd July: We began work in earnest here this day week, the 15th inst. The only way in which we could be of the least use was clearly to establish a hospital entirely under our own control. This the consul, Mr. Zohrab, who knows the Turks and their ways, advised us to do at once, and took us to the Pasha, who, after consulting with the principal medical officer, assigned to us a khan with about 220 wounded (from the engagements at Ardahan, about a month before). We have been at work about seven and eight hours a day, getting the cases into something like a decent state. The principal medical officer at first refused to allow any operations whatever, but I took a firm stand, and told him if we were not allowed to do our duty I should return at once to Constantinople and report the matter to the Sultan, who had promised me special protection in my work. After this, in addition to a strong protest to the same effect on the part of the English Consul, I at last received permission to make the necessary operations. At the last moment, however, on Tuesday, when I was about to commence with three of the most urgent cases, in which amputation could afford the only chance of life, I received an order from the principal medical officer only to perform one. I accordingly amputated an arm in a fearfully gangrenous state, and I hope the patient, although very weak, will ultimately make a good recovery. The next day I insisted upon having liberty to exercise my own judgment as to performance of operations, the consent of the patient himself always being of course a *sine qud non*. ..... Imagine 2000 wounded, or thereabouts, have been here for nearly a month before our arrival, and not a single operation had been performed, as far as I could ascertain, and I have taken great pains to find out the truth of the matter. The poor soldiers themselves are grateful in the extreme for what we do for them, but those of higher rank and authority would, I am sure, much rather be left alone to plod on in their miserable way. ..... Since Mr. Zohrab received your telegram on Friday last we have given the order for 200 rough wooden bedsteads to be made; at present the poor wretches are all lying on the ground. I hope soon to be able to give you a fair report as to the 'English hospital,' but, of course, it will take some time to get the thing into shape ..... When the three surgeons you mention in your telegram arrive I shall, if possible, try to organise out of our number a party to proceed to the front to attend to the recently wounded. I have great faith that much may be done in this way. ..... We are expecting to-night about 300 additional wounded from Kars. We shall have about thirty of the worst cases sent to our hospital I expect, so our hands will be pretty full for the next day or two. ....."

Dr. Featherstonhaugh wrote:—"Erzeroum, 2nd August: Since I wrote to you on the 17th July we have been getting

on very well. On Monday last we discharged 40 soldiers cured, others we had sent out previously, and now we have men busy whitewashing and scouring the rooms, as we daily expect fresh lots of wounded from both Kars and Olti ..... I have operated on two cases lately. In both I removed the foot just above the ankle, and they are, I am glad to say, doing well. Dr. Casson's operation cases are also going on most satisfactorily. Last Saturday Mr. Zohrab began to pay the hospital servants a certain sum per week according to rank. Doing so has made a most perceptible difference both in the care of the wounded and in obeying our orders. Some of the men had not seen pay for 18 months. Mr. Pierce, American missionary, assists us in getting tea, &c., made and distributed along with a little tobacco every day, for which small kindness the poor fellows are most grateful. The weather continues very hot. Yesterday we had a slight thunder shower which cleared the air a good deal. All last night and to-day it has been blowing strongly ....."

Consul Zohrab writes:—"Erzeroum, 6th August: Mr. Casson has, I believe, reported to you how the work has been progressing and what was done to make the influence of real surgeons felt here at once. I am happy to say that Messrs. Casson and Featherstonhaugh's efforts have already met with marked success in the restoration to health of many wounded who, without their skilful care, would have now been in their graves. ..... The Turkish 'house-surgeon' attached to our hospital has not been paid for twenty-two months, and he has lately been selling his clothes to buy food. His position is such that we (Mr. Casson and myself) are of opinion that he should receive a small weekly allowance to enable him to live. By giving this, we shall secure his services, and he will be a useful servant."

The Times correspondent, writing from Erzeroum under date the 13th August, says:—"It is a pleasure to turn from the scene of criminal carelessness and mismanagement daily visible in the Turkish hospital to the clean, well-ordered, admirably organised establishment under the charge of Doctors Casson and Featherstonhaugh, who have been sent out here at the sole charge of that philanthropic nobleman, Lord Blantyre."

ON THE PREVENTION OF DISEASE.

To the Editor of THE LANCET.

SIR,—Whilst freely admitting that further legislation is required before there is a prospect of making any great impression upon the amount of preventable disease in England, I still venture to think that some steps might be taken in that direction whilst we are waiting for a new Sanitary Bill.

We are now in a position to be able to affirm that while good drainage and pure water are of the utmost importance, there is yet some further step requisite before we can hope to check the progress of disease. It is impossible to look back at the sanitary records of the last twenty-five years without perceiving that while certain towns have been great gainers by the introduction of good systems of drainage and pure water, yet on the whole the march of zymotic disease has been unchecked.

With our present imperfect knowledge of the etiology of infectious diseases, it is impossible to say whether by our sanitation we are striking at the disease itself or only preventing its diffusion. Something more is necessary if we would test the possibility of extinguishing a disease. Any attempt to do this must prove fruitless until further measures are taken to isolate and thoroughly disinfect every first case of infectious disease which may appear. And this must be done most thoroughly, and not in the careless and half sceptical way in which such duties are too often performed. If it be still a matter of question whether patients after scarlet fever or small-pox may safely be allowed to communicate with the healthy after three weeks, or must be kept apart until six weeks are over, let the longest limit be chosen, until a final decision is arrived at, without regard to any inconveniences arising therefrom. If it be a question whether all the secretions and excretions from the body during the period of isolation be infectious or only those from certain organs, let them all be thoroughly disinfected, until the truth is clearly determined.

But the difficulty at once presents itself. According to our present arrangements and legislation, there is no one whose duty it is to enforce either isolation or disinfection, and the generality of people are so ignorant of the first principles of sanitary science that they know not how to set about it even if they have sense enough to wish to prevent the spread of the disease. Until, by means of a new law, every householder is obliged to give notice of any case of infectious disease arising in his house, and every officer of health has the power and the means of isolating and disinfecting every case, recourse must be had to other means.

I would propose that the difficulty be met from two sides at once.

In the first place, in every school, whether School Board school or parish, or ladies' boarding school, or grammar school or public school, let some two or three hours a week be devoted to the principles of isolation and disinfection. Some simple book should at once be adopted as the text-book throughout the land. The rules which are known are few and simple, and not hard to remember. By this means within a few years there would be a considerable increase in the knowledge of the practical rules of quarantine in every class and rank.

In the second place it will be necessary, while waiting for this desirable result, to set active hands to work. This would be quite possible if the same text-book were distributed in every parish, urban or rural, to every district visitor, missionary, or bible-reader. At the same time there should be established in every district some sort of Sanitary Aid Association, such as already exists at Manchester, Hastings, and other towns, to supply disinfectants, and to furnish an executive to carry out the financial part of the undertaking.

The work of this association in Hastings, the one with which I am best acquainted, has been most satisfactory. Since its first foundation, although cases of infectious disease have often appeared in the district, yet there has been no epidemic, and in no case which has been in the hands of the association has the disease spread beyond the first patient. The manager of the association has given some lectures, which have been published, on the prevention of the spread of disease, and which would form an admirable text-book for the use of all young people and beginners.

Now that women are feeling that they need work, here is an opening for them to help in the best of all works—the prevention of disease.

I am, Sir, your obedient servant,

Cannes, August, 1877. G. C. BRIGHT, M.D. Oxon.

"A POCKET INSULATED SURFACE THERMOMETER."

To the Editor of THE LANCET.

SIR,—I must thank you for the prompt insertion of my letter of the 21st inst., and have also to thank Dr. Mortimer Granville for the courteous manner in which he admits my prior claim.

On my part I readily acknowledge that the box form given to the thermometer by Dr. Mortimer Granville renders it far more convenient as a pocket instrument, and also to some extent for application to various parts of the body. In the latter respect, however, if the stem of my thermometer be bent at right angles to its present position there would be little to choose between the two.

At the same time I hope I may be pardoned for expressing my conviction that these drawbacks to my thermometer are more than counterbalanced by the following advantages:—1st. The superior accuracy attainable in a straight-stemmed as against a curved-stemmed thermometer. 2nd. The fact that mine is a registering thermometer, whereas the other is not, and probably cannot be converted into one.

No one who has experienced the inconvenience of having to read a thermometer while in position will ever willingly exchange a registering for an ordinary one. The former also has the additional advantage that almost anyone can apply it, and can then bring it to the skilled observer for reading.

I remain, Sir, yours, &c.,

Westminster Hospital, August 25th, 1877. A. DUPRÉ.

THE LANCET.

LONDON: SATURDAY, SEPTEMBER 1, 1877.

FEW of the subjects which occupied the attention of the British Association at its late meeting possess much interest for members of our profession. In spite of the fact that the President of the Association was so distinguished a biologist his science was somewhat at a discount, and the leading biologists were conspicuous by their absence. By one of those unfortunate coincidences which cannot be avoided, the chief event in the biological section was an address which in its subject and scope ran closely parallel to that of Dr. ALLEN THOMSON, on which we commented last week. We refer to the very able paper by Professor MACALISTER on the progress which embryology and physiology have made during the thirty six years which have passed since the Association last held its meeting at Plymouth. Anatomy and physiology have not only made an enormous advance, but have won for themselves an independent place in the order of science. Human anatomy is perhaps in the rear of the progress, but it is constantly becoming more scientific in its clearer recognition, in generalities and details, of the laws and principles of morphology. It is far different with pure physiology, which is trenching on the domain of physical science. Embryology is still in the period of scientific infancy, in which the discovery of general principles has to be subordinated to that of facts; but it is in embryology that some of the most conspicuous progress has been made, and it was to this that Professor MACALISTER devoted the chief part of his address. Glancing at the investigations of HENSEN and VAN BENEDEN on fertilisation, and at the history of the germinal vesicle, the "polar bodies," and some of the later stages of embryonic development to which Dr. ALLEN THOMSON referred at length, the lecturer passed to some other points of great interest which have been elucidated by recent investigations in this country, especially to Mr. BALFOUR'S researches on the development of the limbs of the shark. These observations, taken in conjunction with the structure of the parts making up the limbs of vertebrates, suggest that each limb contains materials for more than one member, and leaves it a puzzle that the limbs of vertebrate animals have never exceeded two pairs. The limitation does not depend on any necessary morphological condition, and must result from some mechanical cause as yet unascertained.

Mr. FRANCIS GALTON, having apparently exhausted the Royal Society as a subject for anthropological study, has transferred his investigation from the unwritten records of Burlington House to the cells of Newgate and the photographs of convicts. Criminal anthropology is indeed a subject of profound interest. He has endeavoured to transfer to the convict class the idea suggested by the "personal equation" of astronomical observers, and to ascertain whether there runs through our criminals any uniform, ascertainable degree of mental and moral defect. The strikingly low character of the physiognomy of criminals has often been remarked, and Mr. GALTON is endeavouring to ascertain whether any average cast of features and expression can be deduced from an aggregate comparison of the portraits of criminals by their combination, either by photography or by the superposition of outline drawings on a transparent substance—a method suggested by Mr. HERBERT SPENCER. We doubt whether the result will be anything more than confusion, but the method is an ingenious and suggestive one, and probably might be employed with advantage in some clinical investigations. Mr. GALTON has found, however, that physiognomic classes of criminals are so defined that very distinct common differences can be discerned between the photographs of criminals of various classes. He discussed at some length the question of the life history of criminals, considered as an anthropological study, and especially the tendency of the varieties which he described to perpetuate themselves, to displace other varieties, and to spread, or else to die out. The hereditary perpetuation of the criminal class is a question of great social importance, but of extreme difficulty. There is no doubt that the criminal nature tends to be inherited, and thus to be perpetuated, while the criminal order is constantly receiving accessions from other classes of low type. There are, fortunately, obvious limits to the extent to which the criminal class proper can perpetuate itself. Women who spend a large portion of the best years of their life in prison cannot contribute many children to the population, and disease and intemperance are constantly at work in this class with peculiar intensity, limiting its extension. But the class of weak-minded individuals to which reference has been made constitutes a much more prolific source of criminal increase. In illustration of this he cited the notorious JUKES family, the ancestor of which was a merely weak man, a hunter and fisher, without any seriously criminal instincts, but whose five hundred descendants have gone extensively to the bad, and furnished a great number of actual criminals. But through disease, intemperance, a high infant mortality, and an increasing sterility, the breed is now rapidly diminishing.

The question of population and its increase, actual and prospective, furnished Dr. FARR with a congenial subject on which to address the section of Economic Science. In his paper he ranged from MOSES to MALTHUS, and from four-place decimals of death- and birth-rates to the doctrine of a "contagium vivum." He does not believe that the diminution of the mortality of England by sanitary improvement is in any danger of multiplying men beyond the means of subsistence, and he deprecated the results of the practices of the French peasant. The effect of these is that, while the population of England and Wales at its present rate of increase would double itself in fifty-three years, that of France would require nearly seven times as long, or 361 years, for the same result; and modern French statists are now regarding with apprehension the declining population of France. It is needless to say that the inventor of the word "zymotic" feels his foot firm at every step in the doctrine of the propagation of disease by minute organisms, and finds facts where even Dr. ROBERTS only ventured on inference from analogy. The transparent lymph of a small-

pox pustule, Dr. FARR maintains, contains microscopic bodies—"variolads"—which by their growth in the body produce small pox; but it will be remembered that in the analogous case of vaccinia Mr. GODLEE failed to find the decisive evidence that the "vacciniads," as Dr. FARR would call them, are the active agents in producing the disease, since, although he succeeded in cultivating them, he failed to produce the disease by their inoculation. The doctrine of spontaneous varieties in the sense of Mr. DARWIN, which Dr. ROBERTS put forward at Manchester as a suggestive hypothesis, Dr. FARR employs as something more than a mere working theory, and presents us with a bright prospect of the ultimate extinction of many diseases.

THERE is this serious drawback to the use of figures as arguments—they not only prove treacherous in the hands of the inexperienced, but readily throw the glamour of error over the reasoning of experts. Statistics, like mathematics, is a precise science, and when applied to facts which do not admit of complete knowledge and exact manipulation, it cannot produce absolute, and is exceedingly likely to bring out inaccurate, results tending to false conclusions. This is too frequently the case in the department of vital statistics. For example, take the commonest and most simple calculation, that made to determine the death-rate of a district. It is impossible to take cognisance of the general health of the population at the periods compared, and nothing definite can be inferred as to the real causes of the mortality. At one time the population may be composed of persons having a high probability of future life, at another it is perhaps saturated with the elements of death. In large communities, not subject to special influences, this source of error may be unimportant, but in respect to communities so small as those of noted health-resorts, the disturbance is large enough to vitiate the calculation; and in the case of institutions, such as asylums and hospitals, the figures must be so affected as to render fair deduction impossible. If the high repute of a salubrious locality attracts weakly persons to take up their residence within its bills of mortality, the death-rate will be injuriously affected. If the average age of an asylum population is raised, or the constitutional character and class of maladies distinguishing a hospital population are so changed as to modify the prospects of survival beyond the average periods of residence, the rate of mortality must be influenced in a manner and degree for which the institution is not responsible. It is strange that these obvious considerations are not always, or indeed commonly, borne in mind even by acute and experienced statisticians. Nor are they the only points of moment overlooked. The ever doubtful factor of classification is almost universally disregarded. If it be desired to determine whether a particular disease is more or less prevalent now than ten or twenty years ago, we must face the fact that no two years agree in respect to the nature of the "returns" which are to form the bases of our calculation. At one time a malady will be extensively recognised, at another almost as generally ignored. The disturbance is most considerable in the case of the commonest diseases. For example, the returns of lung disease upon which computations are often based, are utterly untrustworthy. Pneumonia, bronchitis, tubercle, and phthisis, are undistinguished and undistinguishable. We have no hesitation in pronouncing the inferences derived from these data false and misleading.

It will be interesting, and may be useful, to recall some of the features which must characterise a complete computation in medical statistics. Beyond the gross and proportional numbers to be compared, it is indispensable to ascertain, first, the average age of the patients; second, the general constitution, as indicated by the class of the population from which they have been derived—for example, inhabitants of rural or town districts, and whether affected with maladies or tendencies engendered by residence in special localities; third, the diseases under which they labour, with their conditions and causes; fourth, the circumstances of treatment, including the length of residence in a hospital or under medical care. Each of these points is vital to the integrity of the calculation, and no one can be ignored without depreciating the value of any deductions which may be made. Let us examine briefly at closer quarters. The average age of the patients: this is a matter too often overlooked, but it plays a very prominent part in the issue. It is not enough to say generally that particular diseases commonly affect persons of a certain age; therefore, given the affection, we may infer the age. In dealing with gross numbers of a few hundreds, a comparatively small variation in the years of life exerts a startling influence on the death-rate. Nothing can be more unreasonable than a calculation omitting this important factor. It is incomprehensible that expert statisticians should consent even to look at a rate worked out in ignorance or neglect of the average age. The fact that computations so made are received by a Society devoted to the study of Statistics and largely engaged in estimates of vital proportions must go far to detract from its authority and usefulness. The class of patients forming the elements of a calculation cannot be less important. Take a hundred persons of any given age from an agricultural population, and an equal number of the same age from a manufacturing district—the normal death-rate of the two classes will be widely different, and their probability of survival under any common malady scarcely comparable. To attempt a proportional estimate without recognising this fact must be to court error. Again, as to the disease itself, it is useless to compare names unless the things signified are identical. Before the statistician can proceed a step in his process, he must be assured that the "returns" with which he is dealing are of a nature to justify comparison. It is not too much to say that in the case of large numbers aggregated from different districts this can never be the fact; and when, as we have before mentioned, the returns of different years are to be collated, even approximate accuracy is impracticable. Differences of opinion, of diagnostic power, and of development disturb the bases of the calculation beyond the possibility of rectification. If it should seem to follow from this argument that even the computations of disease, based on returns furnished to the Registrar-General, are untrustworthy, we can only regret a fact which it is vain to disguise. It may happen that in process of years the quality of these returns will improve, but at the present moment, and for some time to come, we fear they must be regarded as fallacious, so various and disturbing are the conditions

which govern the assignment of "causes of death." In their relation to the returns of hospital mortality these conditions play a prominent part, and as the gross numbers involved are small their influence is considerable. The causes of disease, and the occasions of special forms of treatment, are germane to the result. Anything more unreasonable than computation of mortality after particular operations, or methods of treating disease, without particularising the conditions by which the methods adopted have been determined, it would be difficult to imagine. The difference, for instance, between the mortality following amputation in strumous subjects, or in cases with a tendency to septicæmia, and that supervening on the same operation in healthy subjects, must be great indeed! It is well known that the disparity of survivals after surgical interference is marked in the comparison of cases apparently healthy but in some instances living up to the tension of robust health with no reserve of strength, and in others habituated to confinement and capable of an extraordinary vital effort in an emergency. Then comes the element of time: the length of residence as affecting the proportion of ordinary risks to life, and indicating special sources of peril consequent on prolonged suffering, and the wasting effect of morbid processes.

The precise method alone is permissible in dealing with figures, which at the best signify rather than represent facts. Vital statistics are all more or less exposed to sources of serious error, consequent upon the omission of elements which cannot be excluded without vitiating the result; and of all calculations those are the most fallacious which, dealing with medical facts, do not recognise all the modifying medical conditions. We think the application of the Science of Statistics to returns of disease and methods of treatment should be discouraged unless the whole circumstances of each series of cases to be compared can be incorporated in the sum of proportions. By the neglect of this obvious precaution great mischief is done, perfectly worthless calculations are made, and false inferences deduced. The medical and surgical registrars of hospitals leave their work open to misconstruction by publishing incomplete returns. As a matter of fact, Statistics cannot be practised as a pastime; something more than a mere clinical accuracy is required to ensure correct returns. Facts should not be thrown together unless they agree. By lumping cases under general heads of disease or specialties of treatment, comparison is invited. Unless instances are alike in age, constitution, and clinical circumstances, they cannot be compared. The real cause of the confusion which exists on the subject of "hospital mortality" is to be found in the loose practice of making numerical returns, in which cases that do not admit of being viewed in comparison are classed as identical. This hospital dabbling in a branch of science which is mathematical in its nature and requirements renders it unreasonable to complain when outsiders complete the confusion by heaping together heterogeneous elements. Meanwhile we have a right to express astonishment that a committee of the Statistical Society of London should give its sanction to, and even reward, an abuse of figures which cannot possibly be facts in any practical sense, and are obviously inadmissible as statistical data.

A CONSIDERABLE interval has elapsed since we referred to the medical service of the Royal Navy. All our readers who are interested directly or indirectly in the subject will recollect that in February, 1875, a Warrant was issued, giving great and, as we then believed, substantial advantages to naval medical officers. We said, at the time of the promulgation of the Warrant: "It seems to us that the navy is now a much better service than the army for any medical man who has not an aversion to the sea." Time has passed, changes have occurred, we may be on the eve of a great war, and, under any circumstances, it is specially important that at the present juncture the combatant and non-combatant departments of both our imperial services should be well provided in all ranks with good vital material. But, as regards the Naval Medical Service, the vital material is not forthcoming, and appears at the present time to be unobtainable. Ten candidates only presented themselves at the last competitive examination—a most humiliating circumstance, having regard to the fact that there were many more vacancies, even if the candidates are all found competent to serve. Letters continue to appear in the columns of lay contemporaries, and the *United Service Gazette* of last week contained one such, with a long string of grievances and an equally long list of remedies. When the Warrant of 1875 was promulgated, it appeared to us that the regulations as to compulsory retirement and the scale of retiring allowances were fair and reasonable, particularly those relating to the higher grades of the service. But the correspondent referred to above says that "the impracticable association of age and service" has rendered the scheme unfeasible. We fail to see, and should like to know, the reason why. The calculation of service is a puzzling and complicated procedure to an outsider, but it appears to us impracticable to dissociate age from service in arranging a scheme of retirement in any grade. As a matter of fact, however, the result is not happy. We have now had more than two years' positive experience of the Warrant, and in spite of its favourable aspect and of our hopeful prognostications, it has failed to produce any successful results. The service languishes and scrambles on, and the only advantage to those who remain in it appears to be that fewer officers are now placed on half-pay.

We shall return to this important subject in detail very soon, but as things are now, we are almost forced to the conclusion that civil medical work, whether in an official or private sphere, offers increased attractions to the juniors of the profession. The march of sanitary science has opened out a new line of work which, if not in most cases specially remunerative, is novel in its details, and hence attractive, and the merchant service as well as the colonies now absorb a much better class of men, because the pay in the one and the range and style of practice in the other have much improved during the past two or three years. If this be the case, the demand for naval surgeons must be met by an increase in scale of pay and corresponding advantages, so as to make a somewhat monotonous service specially attractive on financial grounds. The matter as it stands at present is most serious to contemplate, for although, if we drifted into war, plenty of volunteers would doubtless be forthcoming, they, in common with the rank

and file, cannot be drilled for special work in a day, and our Crimean experiences should have taught the Admiralty and War Office authorities the inexpediency and costliness of trusting to "panic" supplies, whether of officers or men, combatant or non-combatant.

IT is generally believed that glycerine, taken internally, has little or no action on the system, and its therapeutic employment has therefore been almost entirely limited to external application, and to its use as a solvent, or to disguise the flavour of other medicines. Some years ago it was recommended as a substitute for cod-liver oil in phthisis, but it did not answer the expectations which had been formed of it; and more recently it has been given in varying doses in diabetes, with but small apparent benefit. Hence, it is generally regarded as almost inert, with the exception of a slight laxative action. But some recent experiments on the physiological action of glycerine seem to indicate that it may yet be found to have important therapeutic uses as an internal remedy, and they have greatly extended our knowledge of the physiological action of the drug, and of the doses in which it may advantageously be employed. These experiments were made in M. VULPIAN'S laboratory by M. CATILLON, assisted by M. BOCHEFONTAINE. They were of a very complete and elaborate character, and the accuracy of the results can scarcely be questioned.

M. CATILLON first investigated the action of glycerine in promoting nutrition. He found that guinea-pigs which were fed with glycerine, in addition to their ordinary diet, gained weight much more rapidly than those fed in the same way without it; and on substituting the one set of animals for the other, similar results were obtained. He then devoted a series of experiments to the determination of the effect of glycerine in promoting or retarding tissue-change, and the mode in which it was got rid of or eliminated after absorption. First he inquired into the effect of glycerine on the excretion of urea. These observations were made upon his own urine, and were continued for about a month. After accurately determining the average daily amount of urea without glycerine, he took first thirty grammes (nearly one ounce) of glycerine in water during the day for six days, then forty-five grammes for six days, and subsequently sixty grammes a day. He found that the amount of urea excreted daily was diminished six or seven grammes (about ninety-five to one hundred grains) during the time that the glycerine was taken, but as soon as he ceased to take it the normal limit was resumed. The diminution of urea was not proportioned to the amount of glycerine taken; in fact it increased with the increase of the dose—a fact which M. CATILLON attributes to the great appetite which the glycerine excited. Similar results were gained in experiments on a dyspeptic female—at first the urea was diminished, but a great improvement in appetite resulting from its use, the urea again increased.

The remainder of the experiments were for the most part made on dogs and on himself, and may be briefly summarised. If glycerine thus diminished the amount of urea in the urine, it was important to know whether the amount in the blood was also lessened, or whether elimination was checked. The former was found to be the case; the proportion of urea in the blood was notably less than normal in dogs which took large doses of glycerine. The next step was to ascertain what became of the glycerine in the economy, how much underwent oxidation, and how much was eliminated unchanged, and by what channels. M. CATILLON found that when more than twenty grammes (five drachms) were taken at once a large quantity passed off by the urine, and that this elimination commenced very speedily; but that when it was taken with food, or in small doses at a time, a very much smaller quantity was eliminated. When the doses were large, a considerable irritant action on the kidneys and bladder was observed. The elimination by the skin was found to be little or none, no glycerine being discoverable in the sweat; but it was found that when a hot-air bath was taken the quantity eliminated in the urine was much less than usual. Nor could any be found in the fæces, even when the laxative action was most complete, showing that this action is not dependent on the presence of glycerine in the intestine, and proving also the complete absorption by the stomach and bowels of even large quantities. If, then, the glycerine thus absorbed is only partially eliminated as such by the kidneys, and not at all by the skin or bowels, it must be got rid of in some other way, probably by oxidation; and the rapidity with which this occurs may be estimated by the proportion found in the blood. But experiments showed that one, two, or three hours after the injection of very large quantities of glycerine, no sufficient amount was found in the blood to be detected by ordinary tests, so that only a very small quantity could have been present, and the greater part had probably been burnt off by respiration.

The effect of glycerine on the amount of sugar in the blood is one of the most important therapeutic questions. M. CATILLON found that a certain diminution occurred when the dose of glycerine was very large and given for a long time, but only very slight when in moderate doses; and hence he concludes that any beneficial action in diabetes must be produced in other ways.

The poisonous action of glycerine had already been the subject of experiments by MM. DUJARDIN-BEAUMETZ and AUDIGÉ, who administered it by hypodermic injection. In very large doses the drug caused clonic convulsions and considerable elevation of temperature, and after death extreme congestion of the meninges and brain was found. Similar effects were observed by M. CATILLON when very large doses were injected upon an empty stomach, but no toxic effect was observed when it was taken more slowly and with food. Nor did fatal results occur unless a quantity equalling one-seventieth of the weight of the animal was taken at once. Elevation of temperature was always observed, this varying from 2° to 3° Fahr. in mild cases, and much more in fatal cases. In this respect the toxic action of glycerine appears to differ from that of alcohol in large doses, to which in other respects it bears some resemblance, the temperature, as is well known, falling some degrees in acute alcohol poisoning.

The result of these experiments seems to be that the maximum quantity of glycerine required to exert its beneficial action is from one-half to an ounce daily, this quantity producing the full laxative action, and diminishing the elimination of urea, whilst improving the appetite and promoting nutrition. They do not appear to lend much support to the

use of glycerine in diabetes advocated by SCHULTZEN, especially in the large doses employed by HARNACH (six to ten ounces per diem); but at the same time they indicate certain properties which may be of use in the relief of some symptoms of that disease. Nevertheless the experiments are of great value from the light which they throw upon the physiological and toxic action of this common drug.

IT is gratifying to notice the disposition of Boards of Guardians to take advantage of the Act 33 and 34 Vict., c. 94, enabling superannuation allowances to be granted to medical officers of unions, districts, and parishes in England and Wales, who have become disabled, either by infirmity or age, to discharge the duties of their office, and called the Medical Officers' Superannuation Act. The Atcham Board of Guardians lately resolved, on the motion of the Rev. G. C. GUISE, seconded by Mr. G. MITCHELL, that an annuity of £50 a year should be granted to Mr. WILLIAM EDDOWES, of Pontesbury, as a recognition of special efficiency, attention to the poor, and the lengthened service of forty-one years. Though there are now several instances in which this Act has been applied in favour of medical servants whose age (sixty) and length of service (twenty years at least) qualified them for its benefits, the present instance is one which justifies special notice on two or three accounts. First, it is satisfactory to notice that the chairman of the Board, Sir BALDWYN LEIGHTON, lately elected member for South Shropshire, dwelt at some length and approvingly on the principle of the Act, and on its application to medical officers. He mentioned the case of a deserving relieving officer whose retirement was compelled by age and infirmity, before the days of Superannuation Acts, to whom his (Sir BALDWYN'S) father gave £20 a year, as though from the Board. This shows that men, expert in the administration of the Poor Law, have felt strongly the want of such a measure as the Superannuation Act; in other words, that it only meets cases arising naturally in the Poor-law system. Secondly, it is pleasant to see that the grant was unanimous. Half the value of such acts on the part of Boards is in the grace with which they are done, and there is no grace in such things like that of unanimity. Lastly, it is pleasant to think of the services of Mr. EDDOWES, extending over forty-one years. His diplomas date from 1835. We congratulate him on having so done his work as to have earned not only his superannuation allowance but the words of praise which compose the resolution.

Annotations.

"Ne quid nimis."

THE LESSONS OF THE SMALL-POX EPIDEMIC.

THE only uses of such an epidemic of small-pox as that which has raged for the last twelve months are to accumulate fresh evidence of the deadliness of the disease when left purely to nature; in other words, when not modified by vaccination. It is, indeed, pretty clear that no accumulation of evidence will have any effect on those who are not convinced already by the evidence of Marson and others. What is wanting in these cases is not evidence, but intellectual capacity. We say this in full remembrance of the fact that there are one or two gifted men among the enemies of vaccination. Still they have, to put it mildly, a defect or a peculiarity of brain which is not influenced by evidence. Nevertheless we must solemnly record the evidence as it reaches us from those who, in the faithful and painstaking discharge of the loathsome duties of a small-pox hospital, work it out. Though it will not affect the fanatical, it will satisfy those who have complied with the Vaccination laws that they have reason on their side; not only so, but that their great security will be in being thoroughly vaccinated—not in a mere formal compliance with the Vaccination Acts—but in having arms well marked with vaccination scars.

The first instalment of information supplied by this epidemic reaches us from the Homerton Fever Hospital, in the form of a report from Dr. Collie, the medical superintendent. He gives the result of 915 cases, from Dec. 8th to May 18th. From this it appears that the unvaccinated died at the rate of 53 per cent., the badly vaccinated at the rate of 26 per cent., the fairly well vaccinated at the rate of 2·3 per cent., and that no death occurred in any person under sixteen years of age who showed two good cicatrices of vaccination, and after sixteen only *two such persons died*. Dr. Collie's report is instructive, too, on another point much overlooked—namely, the troublesome and sometimes fatal complications and results of small pox. We hear much from anti-vaccinationists of a few pimples that follow vaccination. But what of the things that follow small-pox? In 151 of the 915 cases there were boils; in 18 cases mania followed small-pox, of which 12 proved fatal; in 7 cases the eye was attacked with perforating ulcer, which often leads to blindness; in 24 cases there was inflammation of the windpipe, of which 8 died.

NERVE-STRETCHING.

THE operation of nerve-stretching adopted in this country by Callender for the relief of neuralgia, and abroad by Billroth, Nassbaum, and others, in cases of "reflex epilepsy," has recently received further attention on the Continent. Four cases are given in abstract in the last number of M. Hayem's *Revue des Sciences Médicales* (p. 285), and are worthy of reproduction. Two were cases of neuralgia, following cicatrisation of wounds. The first recorded was a patient of Paul Vogt's, who had wounded the inner aspect of her right forearm by falling upon a cutting instrument. After the wound had healed, there was much impaired movement of the ring and little fingers, attributed to involvement of the flexer tendons in the cicatrix; and at the same time the seat of the scar was exquisitely sensitive, especially at one point, which, on being touched, gave rise to acute pain, radiating into the fingers named. Every movement of the hand was painful; and at first the pain was thought to be due to the presence of a foreign body in the wound. An exploratory incision failed, however, in discovering any such cause for the irritation of the nerve, and the patient's condition remained much the same, until, about a year after, Paul Vogt dissected out the ulnar nerve from the cicatrical tissue surrounding it, and, raising it out of its bed, practised stretching of the nerve in both directions. The operation was immediately followed by the disappearance of the neuralgia, and in a few weeks the movements of the hand and fingers were re-established. There was no recurrence of the symptoms three years after the operation. The second case is related by Petersen, in which an extensive wound of the upper and inner part of the left leg was followed, on healing, by very severe attacks of deep-seated pain, again suggestive of the presence of some undetected fragment of metal with which the wound was in-

flicted. In this case also no foreign body was found on cutting down upon the injured limb; but Petersen ascertained that the posterior tibial nerve was very sensitive, and that there was some extravasated blood in its sheath. Stretching was practised, and with the same fortunate result as in Vogt's case. Two other cases are recorded, both of tetanus. One was a patient of Paul Vogt's, a man sixty-three years of age, who was attacked by tetanus thirteen days after suffering a contused wound of the palm of the right hand. Large doses of opium gave no relief. The scar in the hand was not painful, nor was there any tenderness over the course of the nerves of the arm and forearm, but in the neck the region of the brachial plexus was very tender, and compression in this part induced tetanic spasms. Vogt decided to try the effects of stretching the nerves of the plexus, and with the most happy result. The nerves were exposed in the posterior triangle by an incision along the anterior border of the trapezius three fingers' breadths above the clavicle, and their sheath, which appeared inflamed, being laid freely open, each nerve was raised and forcibly stretched. The symptoms of tetanus subsided, and the case terminated in complete cure. The other case was not so successful. The patient, a man forty-five years of age, was attacked with tetanus after impaction of a splinter beneath the toenail and exposure to cold. On the eighth day, after abortive treatment by chloral, the surgeon, Kocher, proceeded to stretch the posterior tibial nerve behind the malleolus and also the popliteal nerve. The former appeared much injected and thickened, but the popliteal seemed normal. Some diminution in the symptoms followed for a short time, but the patient soon succumbed. The sciatic nerve exhibited several points of injection. Vogt, in his comments, states that Valentin has found that the nerves do not undergo any histological changes after stretching, and adds that Tutschek, in experiments on decapitated frogs, has found that a slight amount of stretching increases, while forcible stretching diminishes, the reflex irritability of the nerves.

SCIENCE IN ENGLAND AND FRANCE.

THE British and French Associations for the Advancement of Science have met and unfolded their annual budget of knowledge with the usual flourish of trumpets. It must not be supposed that we do not estimate the service rendered by these yearly gatherings at a high value. The only seemingly ungracious but expedient question we desire to submit is whether the outcome of all the trouble and expense attending these anniversaries is so considerable as might be expected. The meetings doubtless answer the purpose of pleasant *réunions*, but do they "advance science," which was their original intention? Is preparation for the annual parade the best form of work for the interval? Does the prominence given to special topics and achievements at the "Science delivery" justly represent their relative importance? Are the most meritorious services of the practical workers adequately appreciated? In short, is this self-assertion on the part of men engaged in the pursuit of recondite knowledge, this appeal to the favour of an unskilled public, a fitting and healthful mode of courting needful patronage and support? All these and a score of serious questions are comprehended in the issue we have raised, whether the annual display really promotes the advancement of science. Obviously it is desirable that publicity should be in some way secured for the progressive labours and triumphs of the men who serve humanity in the field of research and applied knowledge; and if we could be assured that no harm resulted from the method of airing opinions and displaying treasures, just now in favour, it would be idle to take exception to the mode adopted. Meanwhile we fear there is cause to view with apprehension the reflected influence of the public display on personal enterprise. Subjects of investigation are selected with an eye to the near future rather than their ultimate issue. Some of the greatest works ever accomplished in science have required for their completion a long period of patient and persevering toil in secret; others have been spoiled by too hasty disclosure. It is hardly to be hoped that men of mark will have the courage to hold back when the exigencies of contemporary fame necessitate an annual appearance in public. Good work is set aside for that which is of less value, because something must needs be "got up" for the anniversary. The evil influence exerted is making itself felt in this country and we fear across the Channel. It is time to ask attention for a contingency of some moment likely to do serious mischief if overlooked.

THE ETIOLOGY OF PNEUMONIA.

IN the last part of the seventieth volume of Virchow's *Archiv*, which has just been published, Dr. Bernhard Heidenhain discusses the question which has lately received much attention, whether pneumonia is to be regarded as an infectious disease or not. A negative conclusion would undoubtedly be arrived at if it could be shown that a non-specific lesion was capable of exciting an attack of true croupous pneumonia, and Dr. Heidenhain set himself to experiment on this point in the Pathological Institute of Breslau, under the guidance of Dr. Cohnheim. After some consideration the simplest method of affecting the lungs appeared to be to make the animal breathe hot air, and with this object a cannula was introduced into the trachea connected with a tube, a portion of which could be heated at will. The experiments lasted for fifteen and thirty or more minutes. In the course of three, five, or seven days the animal was killed, but in all instances the lungs were found to be perfectly healthy. In other instances the animals were made to breathe ice-cold air from a tube which passed through a refrigerator. The effects were here, however, also negative, nor was any pneumonic inflammation established when the animal breathed an artificially-heated and cooled atmosphere alternately for periods of about a quarter of an hour each. Some explanation of the absence of all inflammatory reaction in the deeper parts of the lungs is gained from the fact, which he ascertained by an ingenious arrangement of thermometers, that dry air, if heated rapidly, parts with its heat, or if cooled rapidly, acquires the temperature of the body in passing down the trachea, so that the deeper parts of the lungs are never exposed to very hot or very cold air, however high or low, within of course certain limits, the temperature of the air may be, provided it is dry when inspired, a point of some importance in pathology. If the air be moist to begin with, the results are different, for then, if breathed at a temperature above 130° Fahr., the lungs begin to be affected, the condition established resembling that of catarrhal pneumonia. The vapour of acetic acid produced effects similar to those of hot moist air. Heidenhain found it to be impossible to experiment with other gases, such as chlorine, for either they proved rapidly fatal, or if so diluted as to be without influence on the general economy the lungs also remained intact.

Heidenhain's researches, therefore, lead him to the conclusion that true croupous pneumonia cannot be excited by irritation of the respiratory passages. If, he says, we are to regard as essential features of croupous pneumonia that one lobe of a lung or a part of a lobe (lobar pneumonia) should be affected throughout its whole substance, that there should be coincidently pleurisy, that the trachea and bronchi should remain intact or at least be only secondarily

affected, then he has been unable in any of his experiments to establish that disease. In all cases where any disease at all was produced, the trachea and bronchi were primarily and the lungs were secondarily affected, and the affection of the lung presented in all cases essentially similar characters. There were more or less numerous small foci of disease which corresponded with what in human pathology would be called catarrhal pneumonia or broncho-pneumonia. Pleurisy was invariably absent. The general result, therefore, arrived at by Heidenhain is rather in favour of the existence of some specific agent as the cause of pneumonia.

PUBLIC HEALTH IN LIVERPOOL AND MANCHESTER.

IT is now more than twelve years since the Registrar-General has published weekly mortality statistics relating to an increasing number of the largest English towns. During this period of twelve years, public interest in sanitary matters has grown to a remarkable extent, much sanitary legislation has taken place, and large sums of money have been spent, or perhaps it would be more correct to say invested, in sanitary improvements. The accumulated mortality statistics of these twelve years are only available for a certain number of the largest towns which have been reported upon during the whole period, but this number includes both Liverpool and Manchester, which, after London, are the two largest English towns. It will not be uninteresting briefly to consider the twelve years' mortality statistics of these two large towns, with a view to judge whether they bear the impress of sanitary progress, and, if so, to estimate its relative extent in the two towns.

Many more than twelve years ago, Liverpool and Manchester had the unenviable reputation of being the two unhealthiest of the large English towns; and although, as we shall show, their degree of unhealthiness has materially altered both actually and relatively, it is very doubtful whether this serious charge could even to-day be successfully refuted. Dividing the twelve years into two equal periods, we find that the average annual death-rate in Liverpool in the six years 1865–70 was equal to 34·1 per 1000 persons living; whereas, in the following six years, 1871–6, it declined to 29·2; the average mortality in the second period showed a decline of 14·4 per cent. from that in the preceding six years. In Manchester the average rates of mortality in the two periods were 32·3 and 29·9 per 1000 respectively, and the decrease of mortality was only equal to 7·5 per cent. In the first period of six years the Liverpool annual rate exceeded that in Manchester by 1·8 per 1000, whereas in the later six years the Manchester rate actually, though slightly, exceeded the Liverpool rate. Indeed, the annual rate during 1875 and 1876 was equal to 29·6 per 1000 in Manchester, while it did not exceed 27·6 in Liverpool. During the past two years, therefore, Manchester has been as much more unhealthy than Liverpool as Liverpool was more unhealthy than Manchester eight or ten years ago. The reason why Liverpool has so far outrun Manchester in the struggle for improved sanitary condition is surely worth investigation. Space will not permit a detailed examination of the mortality statistics of the two towns, with a view to throw light upon the much slower sanitary progress which has been made in Manchester than in Liverpool. It will only be possible to note one or two facts that should be borne in mind in examining this subject more closely. The density of population within the arbitrary boundaries of Liverpool has increased during the past twelve years far more rapidly than within those of Manchester. Between the middle of 1865 and the middle of 1876 the increase of population was equal to 12·3 per cent. in Liverpool, and was but 4·1 per cent. in Manchester; this increased density in Liverpool gives greater value to the decreased mortality. On the other hand, Liverpool is more self-contained than Manchester, which has been drained of a considerable proportion of its young adults, living at the ages of lowest mortality, to form part of the increase of population in the borough of Salford, which is clearly an offshoot of the city of Manchester. The death-rate in Salford is, however, so high that it is doubtful whether the combined statistics of the city and borough would be more favourable than are those of Manchester. During the last two years the zymotic death-rates in Liverpool and Manchester have differed but slightly; the fever-rate still shows a considerable excess in Liverpool, but whereas it has steadily declined in this town in recent years, it has shown a tendency to increase in Manchester. These and kindred facts deserve consideration in the investigation of the slow rate of sanitary progress in Manchester. Liverpool is still pre-eminent for its excessive rate of mortality among infants under one year of age and among persons aged upwards of sixty years.

THE ASTLEY COOPER PRIZE.

A LETTER which we print in another column indicates that the sense of the injustice of the award of the Astley Cooper Prize is not confined to the correspondent whose letter appeared last week. It is perhaps natural that the indignation of an unsuccessful candidate should be readily excited by an apparent irregularity in the award of the prize sought, but it will be strange if the feeling expressed in these letters is not widely shared by the profession. The legal question is one for legal decision, but the words of Sir Astley Cooper's will certainly appear to us to justify the objectors, who urge that the prize cannot be awarded to the two authors of a joint production. In only one sentence in the published extract from the will is it necessary to allude to the successful competitor individually, and here the singular only is employed. It is the "successful candidate," not "candidate or candidates"; and the careful phraseology of the will indicates clearly that it has been carefully drawn up by a lawyer. In the published conditions appended to the extract from the will, and advertised, the singular again occurs: "the prize will be awarded to the *author* of the best essay"; "each essay must be accompanied by a sealed envelope bearing the name and address of the *writer*."

But whatever may be the legal decision, it is clear that the award cuts at the root of all fairness in the competition. Two men can do double the work of one, and it is rare indeed that one man is so exceptionally circumstanced that he is more than a match for two. Probably such a condition never occurs among those who are competitors for the Astley Cooper prize. *Cæteris paribus*, the prize is, and practically must be, a foregone conclusion to a joint production. Once admit the principle which is declared in the award, and, as we have said, the fairness of the competition is at an end. For if two men may jointly compete for the prize, why not three—why not four? We would advise half a dozen young anatomists, with not much to do, to set to work on the dissection of the cranial nerves for the next competition. The prize is theirs to a certainty; at any rate, no single competitor can have a chance. The greater the number of dissectors who work at the competition, the better will be the dissection and the richer will be the museum of Guy's Hospital, to which the preparations go. Only it is not in accordance with English ideas of justice to term the reward a "prize," and invite competition for it in the terms we have given.

There is another point concerning which the medical profession will demand and should have some explanation.

Each essay or treatise "shall contain original experiments and observations which shall not have been previously published." Now, Messrs. Eulenberg and Guttmann, to whom the prize has been awarded, are the authors of a recent published work upon the same subject, and as this work is somewhat elaborate, the profession ought to be assured that the essay for which the prize is awarded is not merely a *réchauffé* of their published work, perhaps garnished with a few sprigs of original research so as to come within the literal conditions of the will, but that it actually fulfils the spirit of the conditions, and consists to a considerable extent of new material.

SUICIDE OF THE INSANE.

IT is well known that the insane, when possessed with a desire, or sense of obligation, to commit suicide, exhibit considerable ingenuity in carrying out their purpose. They will not only persistently watch for an opportunity, but devise extraordinary modes of self-destruction. Some of these are astounding in their character. For example, not very long ago there was a case at one of the asylums in which a man suddenly plunged his head into a tureen of soup, which had just been placed on the table. Meanwhile, many instances of seeming suicide do not fall under the description of intentional death-seeking. They are rather "accidents," so far as the lunatic is concerned, in the pursuit or accomplishment of other objects. A case is now reported in which a man, somewhat beyond the middle age, laboured under the delusion that he could with impunity make incisions in his body and perform surgical operations on his own person without danger. This form of mental perversion is not uncommon, and it is frequently accompanied by a strong morbid impulse to inflict what are, in fact, serious injuries. The sensation of pain seems for the time to be suspended, or, more accurately, it is overpowered and subdued by the absorption of energy, and its concentration on some all-engrossing purpose. This is an exaggerated and insane variety of the state which enables men and women, animated by a high or intense resolution, to dash through fire or water, and, doubtless, it was something akin to this feeling which rendered martyrdom possible even to the weak and sensitive when possessed by a transcendant idea. The lesson to be learnt from instances like that to which we have alluded is the imperative need of watchfulness not only over cases in which the tendency to suicide is distinctly formulated, but where the patient is subject to strong impressions of any kind, whether pointing to the infliction of bodily injuries, or the submission to overwhelming ideas.

THE ALKALOIDS OF ERGOT.

M. TANRET, of Troyes, has communicated to the Académie de Médecine some researches of importance on the active principle of ergot, which, two years ago, he described as "ergotinin." It has been suggested that this is merely the ergotin which Wenzell discovered in 1865. Two alkaloids were then described, ecbolin and ergotin; but the identity of these has since been admitted. The points of difference between this substance and Tanret's ergotinin are thus summarised. Ergotin is an amorphous substance, blackish-brown in colour, soluble in water, and insoluble in ether and chloroform. Ergotinin, on the other hand, is crystalline, white, insoluble in water, but soluble in ether and alcohol. There is, indeed, considerable doubt whether the amorphous ergotin is really an alkaloid, or even a simple substance, and whether it differs from the extract prepared and called by the same name by Wiggers and Bonjean. A magnificent red colouring matter, sclerethyrin, has been obtained from ergot, and it has been thought to be the same substance as ergotinin, but the spectra of the two are distinctive. M. Tanret has not yet determined the best means of extracting the ergotinin, but he has obtained enough to give us some information of its chemical and therapeutic properties. It is an extremely oxidisable body, and undergoes a peculiar transformation under the influence of light, becoming rapidly dark and resinous. The ethereal and alcoholic solutions are highly fluorescent. It would seem to have some chemical affinities with narcotin. It is a feeble base, combining with acids with difficulty, and forming crystallisable salts. The sulphate of ergotinin has, however, not yet been obtained. Its most characteristic chemical reaction is that, when a little ether has been added to it, sulphuric acid diluted with one-seventh of water causes a reddish-violet tint changing to blue. Ergot, it is calculated, contains only one part of this substance in one thousand. It has been found that its action on uterine hæmorrhages is the same as that of ergot; the quantity needed being very small—not more than two to four kilogrammes in the twenty-four hours.

Other physiological observations on the action of this substance seem not to have been made, and it is singular that after two years M. Tanret is not able to publish a process for its extraction. But we may point out that, if his conclusions are corroborated by further observation, it is possible that we have in it the only active principle of ergot, for the dose of ergotinin asserted to be necessary to produce its effects on the uterus is proportioned to that of ergot. Taking the proportion of the alkaloid at one part in a thousand, two to four milligrammes are equivalent to a daily dose of thirty to sixty grains of ergot—about the quantity commonly given.

LOCAL HEALTH SELF-GOVERNMENT IN RUSSIA.

IF local self-government in municipal matters be still, as some will have it, on its trial in this country, what shall we say of local self-government, as understood here, in Russia? Odessa was the third city of that Empire—St. Petersburg and Moscow preceding it—to which was conceded the privilege of the new municipal organisation instituted by the Imperial statute of the 16th June, 1870. By this organisation local municipal administration appears to have been in a large measure instituted according to our notions of local self-government, and the inhabitants of Odessa, highly delighted with the privileges granted to them under the statute, at once proceeded energetically to set their city in order, and to make it an example, perhaps, for others to follow. But hardly had they entered upon the pleasing task when they were confronted and their enthusiasm damped by the same awkward incubus which weighs upon the action of all local self-government or other public government whatsoever. The new municipality was elected, and at once began, encouraged and supported by the acclamations of the inhabitants, to elect the necessary officers for the proper administration of the city's affairs. But, alas! this first election saddled the city with an annual charge of 50,000 roubles. But even this, although it seems to have startled the people, was not sufficient to awaken them to a proper sense of the important, indeed essential, part which money must play in all municipal proceedings for the improvement of a city. Looking at the needs of the city, rather than to the wherewithal to meet them, the municipality proceeded to develop great schemes of water-supply, sewerage, road-making, road-mending, and gas lighting. Although but in the fourth year of its existence, the new municipality has entered upon all these schemes, and here is the result. The waterworks have absorbed a capital of seven millions of roubles, but the receipts from them cover but two-thirds of the sum guaranteed to the contractors,

leaving an annual deficit, to be made good by the municipality, of from 100,000 to 125,000 roubles. The sewerage works have been let out on contract at an unreasonably great cost, and have been carried out, as far as completed, in a very unsatisfactory manner. The other works are at a standstill for want of funds, and the municipality proposes to effect a loan of four million roubles to continue them. At the end of the third year of the new municipality debt had been incurred for the works in question to an extent of 300,000 roubles. The fourth year, just completed, presents a still more dolorous spectacle. The municipal chest is empty, contractors are pressing, and it has had no help but to apply to the Government for an advance upon the security, so to speak, of the contemplated but not yet completed loan. The Government supplied the four million roubles, and the fourth year of the new municipality has ended with the absorption of the whole, the works of sewerage, road-paving, and lighting uncompleted, and a balance against the municipality of 200,000 roubles.

The story is a pitiful but simple one. Odessa, intoxicated with its new powers of local self-government and free from the healthy repression of improvement-rates, was not to be restrained from seeking what it needed by vulgar considerations of money, and it now has to drink its cup of ratepaying bitterness at a gulp. But it will eventually reap the good it has sought, and its experience will be a timely warning to other cities and towns in Russia to proceed in their internal improvements with forethought.

DRAINAGE OF THE EYE IN CASES OF DETACHED RETINA.

THE *Deutsche Zeitschrift f. prakt. Med.* of August 18th, publishes an abstract of a paper read by Dr. Hermann Cohn on this subject before the Silesische Gesellschaft für Vaterländische Cultur. He remarked that detachment of the retina, especially in cases of high myopia, has hitherto been regarded as one of the most incurable diseases of the eye. Amongst 20,000 cases of ophthalmic disease that had fallen under his notice in the course of ten years, there had been 191, or about 1 per cent., of cases of separation of the retina. Sichel, Kittel, and Arlt endeavoured to effect a cure in such cases by the introduction of a needle through the sclerotic. Graefe not only punctured the sclerotic, but divided the retina with the object of allowing a communication to be established between the fluid subjacent to the retina and the vitreous. This proceeding, though occasionally brilliantly successful, was, however, found to be not unattended with danger of cyclitis and inflammation of the vitreous, and it fell into discredit. Cohnheim, Lasinsky, and Samelson have observed cases where a cure resulted from the employment of internal means, by pressure and by confinement in a dark chamber. Such a result, however, is exceptional. About six months ago Wecker suggested the trial of drainage of the eye by means of the introduction of a loop of gold thread through the sclerotic and under the detached retina. He applied this method in twenty-six cases, but has not published them. Cohnheim has tried it only in four cases, the myopia varying from ten to twelve dioptrics, and has in all instances obtained excellent results. The gold wire should be very fine. In the course of these experiments Cohnheim has satisfied himself that the human eye can carry for months a gold wire of one-third of an inch in length, without the slightest reaction being excited or inconvenience felt. Detachment of the retina may, by this means, be immediately prevented from continuing, even after it has been of three years' duration. The retina, as soon as it has become reapplied, becomes again immediately capable of perception, even after the lapse of three years, so that the field of vision recovers its normal extent. He goes on to say that only the sense of space returns, but not the perception of colour. Blue-blind and green blind eyes at the time of detachment remain blue-blind and green-blind. After some time a separation is discernible, but it is flatter, more rugose, and no longer vesicular; and this, by slight movements of the gold drain can again be diminished. Cohnheim finally thinks the proceeding of drainage of the eye especially adapted for cases of subretinal cysticerci. In no instance was any inflammation of the eye or impairment of the pre-existing amount of vision observed. It has also the advantage that it does not interfere with general methods of treatment.

HOME HOSPITALS FOR THE WELL-TO-DO.

If rumour is to be trusted the affairs of the society, or company, or association for the establishment of Home Hospitals do not progress so smoothly as might be expected from the flourishing prospectuses which have from time to time been issued. It would be interesting to know what is the exact state of affairs at the present moment, and whether the idea is to issue in a philanthropic mode of action, or in a commercial or a speculative form. Experience of speculative companies founded either on philanthropic ideas or on hopes of large profits does not lead to much confidence in their methods and results, and if the promoters desire to utilise the large support which they have received from the profession and the public, they must beware of following in the footsteps of other similar schemes. Above all, let them avoid suspicion by a full and complete statement of all expenses and estimates of every kind, and let there be no *arrière pensée* of "costs of promotion" or "directors' fees." Any suspicion of such expenditure, under whatever form disguised, and however unfounded such suspicion might be, would, especially after recent disclosures, do more to prevent the public from taking up the scheme than any number of errors of detail. For nothing so strongly prejudices the public mind, and especially the more benevolently disposed, as the idea that philanthropic proposals disguise intents of gain. It would be greatly to be regretted if any such suspicion should attach to this movement.

HEALTH AND DISEASE IN REFORMATORIES AND INDUSTRIAL SCHOOLS.

THE issue of the twentieth annual report of the inspector of certified reformatory and industrial schools records the fact that the reformatory movement has borne the test of twenty years' existence and growth. The total number of inmates of these institutions in England and Scotland, at the end of last year, was 6614 in reformatories, of whom 5402 were boys, and 1212 girls; and in industrial schools 10,499 boys and 2976 girls: in all 13,475 children. Thus more than 20,000 children were detained in these institutions on 31st December last, and as this number differed but slightly from the number at the beginning of the year, it may be presumed that a very similar number were under control and observation during the whole year. The health-statistics of this number of children, carefully prepared, would form a valuable contribution to vital statistics; but, beyond this, surely this report should afford some means for forming an opinion as to the health of the children detained in these institutions. The report may, however, be said to give no summarised statistics of any value on this important subject. We are, indeed, told that during the year 57 deaths occurred in the reformatories, or 14 more than in 1875, and also that 19 were discharged for disease. The death-rate was thus equal to 8·6 per 1000, which is very high for the age of the inmates, and is evidently under-

stated, on account of the number of those discharged for disease. It is stated that in the industrial schools 124 children died in 1876 (against 147 in 1875) in addition to 47 discharged as diseased; thus, the death-rate in these schools was equal to 9·2 per 1000, and was still higher than in reformatories, the understatement being probably greater on account of the larger proportion of discharges for disease. Without a return of the ages of all the inmates it is impossible to calculate the normal death-rate of an English population at similar ages; it is, only, however, necessary to state that the average annual death-rate in an English population between the ages of 5 and 20 years does not exceed 7·1 per 1000, in order to show that the death-rate in our reformatories and industrial schools is excessive, and calls for investigation. These reports should give more particulars relating to the causes of death and of sickness among the children in these schools.

CONTINENTAL HOTELS.

"A TRAVELLER" has written to a contemporary to announce the astonishing discovery of an honest hotel-keeper, who set off in great haste after one of his guests to return a 100 fr. note left carelessly in a bedchamber. The scene of this thrilling episode was Italy, and we can only hope the narrative will not have the effect of inducing wayfarers in that favoured land to prove indifferent to the safe custody of their belongings. It is not, however, against loss of property frequenters of continental hotels need to be chiefly on the alert. The greatest peril of all that besets them is the loss of health. The sanitary arrangements of most of these hostelries are indescribably horrible. Drainage, water-supply, and ventilation are alike defective, in too many instances altogether execrable. Reform and reconstruction have been repeatedly urged on the authorities of towns and the proprietors of hotels. In England it is almost insuperably difficult to overcome the *vis inertiæ* of ignorance; but on the Continent, and particularly in the tourist route, we have strong prejudices and adverse experience to vanquish. It is so much the habit of Englishmen to grumble at everything, and finally put up with scandalous ill-usage and inconvenience, withal paying handsomely for the infliction, that the continental hotel-keeper, who is a shrewd tradesman, falls back comfortably on the persuasion that no amount of neglect and mismanagement will deter travellers from patronising his establishment; and it is hard to say that he has not the logic of facts on his side of the argument. If tourists would avoid the haunts of disease and dirt the desertion would be more persuasive than many words.

UNQUALIFIED MEDICAL PRACTICE IN SALFORD.

IN his recently published Report upon the health of Salford in 1875 and 1876, Dr. Tatham remarks that "in spite of recent prosecutions in Manchester, unqualified practice is as common as ever in Salford." There is no reason to doubt that there is still much unqualified practice in Salford as in most of our large towns; indeed, Dr. Tatham testifies from his personal knowledge to "the carrying on by chemists and druggists of a large prescribing trade, and that not only over the counter, as it is termed, but in some instances by visiting the patients at their own homes." It is, however, satisfactory to find, from figures in Dr. Tatham's report, that the proportion of uncertified causes of death within the borough, large as it still is, was lower in 1876 than it had been in 1875. In 1875 the cause of death was certified by registered medical practitioners in 86·4 per cent. of the deaths registered, whereas in 1876 this proportion had increased to 89·1 per cent. With regard to inquest cases there is a certain ambiguity in Dr. Tatham's figures. He gives the numbers of "Inquests and Coroners' Officers' Reports" in 1875 and 1876 as 267 and 226 respectively. According to the returns of the Registrar-General, however, only 185 inquests were held in Salford in 1876, against 262 in 1875, and it would appear that to the inquests Dr. Tatham has added the cases in which the coroner's officer has reported that an inquest is unnecessary. In such cases the deaths are almost invariably registered without any certificate or scientific evidence of their cause, and should, therefore, be classed with the uncertified deaths. With this correction, it appears that the proportion of inquests held in Salford declined from 6·1 per cent. in 1875, to 4·2 per cent. in 1876, and the proportion of uncertified deaths—that is, of deaths registered without any scientific evidence of their cause—which was equal to 7·4 per cent. in 1875, declined to 6·8 per cent. in 1876. The decline in the proportion of inquest cases in Salford is an unsatisfactory feature in the return, and it is worthy of note that in Manchester the proportion of inquests held was nearly twice as high as in Salford. When it is borne in mind that by far the largest number of uncertified deaths are those of infants and young children, it may well be wondered how long the State will omit to afford some security against the neglect of infant life, which is directly encouraged by the facility with which the deaths of infants can be registered and their bodies buried without any satisfactory evidence of the cause of death.

HEALTH REPORTS.

THE report on the health of Bradford for the past year, presented to the Sanitary Committee of the Corporation by Mr. Harris Butterfield, medical officer of health, shows a considerable comparative improvement in the health of this large borough. The population is now estimated at 173,000, and the death-rate last year was 23·9 per 1000, being 3·2 less than in the previous year, and 1·9 per 1000 less than the average for the last eight years. Infant mortality is, however, still above the average of other large towns. One very creditable feature in the sanitary work done at Bradford is the examination of new buildings, to which important subject we referred in noticing Dr. Tripe's report a fortnight ago. By a local Act passed in 1875, no new building can be occupied as a dwelling-house until the drainage thereof has been made and completed, nor until such building has been certified by the medical officer of health to be fit for human habitation. During the past year 1316 new houses were examined under the provisions of this Act, and in 84 cases the granting of certificates was deferred on account of dampness or other defects. This is a step very much in the right direction, and such work ought to be part of the routine business of all sanitary authorities. During the year 40 houses were closed in the borough as unfit for human habitation. Fifty cellar dwellings were also closed, and it is expected that the use of all the latter will be prohibited in the course of a year.

The report of Dr. Thomas Stevenson to the vestry of St. Pancras relates in a great measure to the epidemic of small-pox. A total of 103 cases occurred during the year, 20 of which proved fatal. Seven of these died in private houses and 19 in hospitals, and the medical officer records that to the early removal of cases into hospital "must be attributed in part the comparative freedom from small-pox of this parish in 1876. Three per cent. only of the mortality from small-pox in the metropolis was referable to the deaths of St. Pancras parishioners."

Dr. H. J. Paine, medical officer of health for Cardiff, mentions, in his annual report for the past year, the noticeable

fact that four cases only of small-pox occurred in the district, and that these were all imported by the shipping. The well-water of this town and its pollutions form the subject of a useful chapter in the report, and should lead the inhabitants to reform their water-supply as speedily as possible.

From the report of Dr. George Bland, it appears that the borough of Macclesfield has been suffering severely during the past year from epidemics of measles and scarlet fever, which caused a great increase of mortality among children. Small-pox was introduced, but did not become epidemic. Active preparations are being made for the establishment of an infectious diseases hospital.

WANT AND WASTE.

THESE two evils appear side by side and stand related, more constantly than many economists suppose, as cause and effect. The want of food and waste of the means of producing it are closely associated as pressing questions of internal management and policy. Land is wasted, labour is wasted, seed is wasted, and last, but not least, the fertilising agent, manure, is wasted. The non-utilisation of sewage is one of those wondrous acts of obstinate folly which would be inexplicable if persistence in a blind policy were not almost the rule of social activity. It has been conclusively demonstrated that the sewage wasted would multiply the crops the land under cultivation now yields. It has also been shown that by so disposing of the material at present burdening the rates, a direct saving of public money might be effected, while something like immunity from zymotic disease would probably be secured. These assumptions have, by the force of argument and experiment, been raised to the dignity of facts. Nevertheless, nothing is done to secure the advantages certain to accrue to wiser measures. Pauper labour is wasted, and the burden of pauperism augments because no step is taken to carry out an undertaking which promises to save money and produce profit. One of the most potent measures in relief of the poor-rates is the utilisation of sewage. This view of the question needs to be further illustrated and enforced. It is too frequently overlooked, and, strangely enough, by those who professedly bring the subject of "Population and Food" under scientific scrutiny.

ICHTHYOSIS, OR PSORIASIS OF THE TONGUE.

ALTHOUGH the connexion between the condition known as ichthyosis or psoriasis of the tongue and cancer of that organ is now well established, it is useful to return to a question which has so practical a bearing upon surgical treatment. One of the most recent contributions to the subject is that of Nedopil, of Vienna, who, in an exhaustive review of what is known upon the point, adds several facts, which are important, if not novel. He believes the ichthyotic condition (or, as he prefers to style it, psoriasis) to be the result of a chronic irritative process in the subepithelial layer of the lingual mucous membrane. Owing to this there is a greatly increased development of epithelial cells from indifferent cell-tissue, so that the layer of stratified epithelium increases greatly in thickness, an increase not owing to the proliferation of the cells *in situ*. The transition to actual cancer-growth is easy; it requires only the growth of epithelial elements into the deeper layers of the mucous membrane, instead of upwards towards the surface, to transform the simple into the malignant formation. This, in brief, is the sum and substance of this writer's view as to the pathogenetic relations of lingual epithelioma and ichthyosis, based upon the examination of fifteen cases. As regards etiology, a long-continued use of any active irritants is said to favour the production of lingual or buccal psoriasis, such as highly-spiced foods, strong drinks, and, above all, tobacco; and tobacco-smoke rather than the substance itself, for, as compared with the smoker, the chewer of tobacco is remarkably free from the complaint. Nedopil asserts, moreover, that cigarette-smoking is the most harmful of all methods of taking the baleful weed; and as tobacco-smoke contains such irritants as butyric, acetic, and phenic acids, as well as carbonate and acetate of ammonia, he thinks that the evidence of local irritation in cases of cancer of the tongue in smokers is as marked as that of cancer of the scrotum in chimney-sweeps. The male sex and advanced life are predisposing conditions, and as to the duration of psoriasis lingua before the appearance of cancer, this author agrees with others in assigning it as long a period as from fifteen to thirty years. As regards treatment, however, he points out that all internal and external remedies are powerless to cure or even to arrest the psoriasis when once developed, and that the abstention from tobacco-smoking, &c., is equally inefficient. The frequency with which the affection is followed by cancer is notorious, and he does not hesitate to advise the excision at as early a date as possible of the milky patches of psoriasis where these are so circumscribed as to permit of such a procedure.

RURAL SANITARY WORK.

AN interesting Report, recently presented by Dr. Thorne Thorne, one of the medical inspectors to the Local Government Board, shows conspicuously enough how, under present regulations, the rural sanitary work of the country is (or can be) carried on. Dr. Thorne was instructed some weeks ago to inquire into the circumstances attending the persistent continuance of scarlet fever in two villages near King's Lynn. He found an abundance of insanitary circumstances to account for the tenacity with which scarlet fever or any other disease would be likely to cling to the inhabitants of such an eminently unsavoury district. It appears that four years ago the sanitary authority appointed a medical officer of health and an inspector of nuisances *for one year*. The year expired, and these officers had done their work so well that it was resolved to determine the appointments. The salary of the medical officer was stopped, and he was requested to exist in name, and to come upon the scene of his former labours only when specially requested to do so. The inspector was dismissed, and his work was distributed among the relieving officers of the district, who do not, however, appear to have been furnished with any rules for their guidance. During the past three years the medical officer has been engaged about four times, and on these occasions of course it was not to prevent but to cure the results of sanitary shortcomings. This is a fair specimen of the way in which public health administration is conducted in many rural districts.

A NEW CONVALESCENT HOME.

WE gladly welcome the establishment of another of these useful institutions, the first stone of which was laid at Hunstanton, in Norfolk, on the 22nd ult., by the Countess of Leicester. The want of a convalescent home has long been felt in the Eastern Counties; and in 1872, as the result of a public meeting at Lynn, two cottages were secured at Hunstanton, with accommodation for twelve persons, which was soon after increased so as to make room for twenty inmates. Shortly after the Prince of Wales had recovered from his severe illness, the then Bishop of Ely, Dr. Goodwin, Canon Selwyn, and others conceived the idea of erecting a home as a memorial of thankfulness for his Royal Highness's recovery,

and liberal subscriptions having been promised by the Prince, the Earl of Leicester, the Bishops of Ely and Norwich, and others, a building was designed which is calculated to accommodate forty patients, and will cost about £4000. Lord Leicester has given the munificent donation of £1000, but £1300 are still required, so as to open the building free from debt. It is expected that the hospital will be supplied with patients from at least four or five of the Eastern Counties, none of which have any establishment of the kind within their respective boundaries.

THE EMIGRATION SERVICE.

WE have received a long letter from a correspondent at Melbourne, setting forth certain grievances suffered by him in connexion with his journey to Australia, when he took charge of a party of emigrants to Freemantle. These were—(1) that he was paid £30 for his services (having agreed beforehand to take that sum) instead of the ordinary allowance of 10s. per head; (2) that "some person" charged him a fee of £5 as commission; (3) that he was compelled to register; (4) that he was misled as to the distance and cost of travelling between Freemantle and Melbourne; and (5) that no authorised or other instructions were given as to the manner in which he should perform his duties. It is hardly necessary to point out that if the surgeon in question had applied to the Agent-General for the colony of Western Australia, instead of to an advertising agent, he would have been entitled to the usual scale of head-money, and would have saved his £5. He was very properly compelled by the Registrar-General of Seamen to become "a registered medical practitioner" before signing articles, or taking charge of emigrants. But as the Board of Trade has not yet learnt the importance of having medical as well as other kinds of work at sea done in a systematic manner, no official rules are laid down for the guidance of emigration surgeons, and the various colonial governments or their agents do not of course care to set the example. We do not think altogether that our correspondent has much to complain of. All those who desire the charge of emigrant-ships should apply at head-quarters—i.e., at the offices of the respective colonial agents, the names and addresses of whom may be found in any London Directory.

CHARGE OF REMOVING INFECTED PERSONS.

ON August 18th, John Davis, a baker, of Essex-road, Islington, was charged before the Reading County Bench with having, on the 30th June last, while in charge of one Eliza Barnes, a person suffering at the time from small-pox, wilfully exposed her in the Oxford-road, in the parish of Tilehurst, without taking precautions against spreading the disorder. The prosecutors were the guardians of the Bradfield Union. Barnes was, at the time of being attacked with the alleged small-pox, in the service of Davis. Mr. Lidbetter, of Essex-road, was sent for to see Barnes, and found several red blotches on her face and arms, with a raised centre of a whitish appearance. They were about the size of a halfpenny. There were also three small spots. He could not account for the three small spots, and told the defendant, as small-pox was about the neighbourhood, the case was rather doubtful, and he recommended isolation. In answer to the question whether the girl should be sent home immediately, he said it would be better to keep the girl a day or two longer to see if anything else occurred. She was removed the same day. On the next day, Dr. Richard Cox, of Theale, saw her, and in his evidence he said he found her suffering from small-pox. Annie Barnes, on being sworn, said she was telegraphed for on the 30th of June, to see her sister, by Mrs. Davis, who said her sister was ill, and would have to be sent home or shut up. She preferred taking her home. The Bench was divided in opinion, but the majority thought that Davis knew it was a very doubtful case. His solicitor said it must be shown that the defendant had a wilful knowledge that at the time he sent the girl away she was suffering from small-pox. The Bench, thinking that Davis was not sufficiently certain of its being small-pox to bring it within the section, discharged the case. Mr. Lidbetter, very properly, at first sight of a somewhat ambiguous eruption, declined to give other than prudent advice; but, as he thought the case might turn out to be small-pox, and the medical man who saw it the day following declared it to be small-pox, it seems to us that there was ground enough for a different decision from that arrived at by the Bench. Be this as it may, the guardians did rightly in bringing the facts before the magistrates. Every sanitary authority should use its power most rigorously to punish those selfish people who send infectious diseases, or diseases that they fear are infectious, all over the country.

TROPICAL HYGIENE.

THE Report of the medical superintendent of the Public Lunatic Asylum of British Guiana (Dr. Robert Grieve) for 1876, contains some instructive hints on certain matters of hygienic administration in tropical climates. It would appear that the inmates of the asylum had suffered much and continuously in former years from diarrhœa. Since an alteration in the method of excremental removal, and an improved state of ventilation of the wards, this liability to diarrhœa has disappeared. Common zinc pails are used as latrines. In these charcoal is placed as a deodoriser, and they are emptied frequently during the day, the contents being at once applied to land under cultivation. There are no closed sewers about the asylum. Surface brick drains carry off the slop and waste water. Free ventilation is obtained by having in each building outlet openings in the ridge, or near the roof, whilst round the wards are a large number of fixed jalousies which cannot be closed, and through which a free current enters. Where the temperature of the air rarely falls below 80° F., as in British Guiana, draughts may be disregarded under ordinary circumstances. The water used for drinking, as customary in the colony, is rain-water collected from the roofs and stored in covered iron tanks above ground. Other water, obtained from the town of New Amsterdam, and unfit for drinking, is used for bathing and laundry use. The site of the hospital, it would seem, has been recently drained with tile-drains, which have an ample outfall. This measure, while preventing stagnation of water in the subsoil, has largely increased the value of the land for agricultural purposes.

The Public Lunatic Asylum, if we mistake not, had a very evil sanitary reputation before the introduction of the measures of excrement removal, ventilation, and drainage above described. We gather from Dr. Grieve's report that this is now a thing of the past.

ALBUMINURIC RETINITIS.

THIS subject is discussed by Dr. O. F. Wadsworth in the volume of the Boston City Hospital Reports just issued. After detailing the ordinary appearances of the affection, the groups of brilliant white or yellowish-white dots or patches chiefly about the optic nerve and yellow spot, and, in more typical cases, the series of radiating stripes or dots at the macula—which may be associated with other changes, as hæmorrhages, striation of arteries, dwindled size of the latter, and enlargement of veins,—he proceeds to give details of a few cases he has personally observed. The first changes to occur are, he believes, those of neuro-

retinitis, with a variable degree of general opacity and swelling of the disc or retina, venous hyperæmia, and hæmorrhages; the occurrence of the white dots being a later event. Speaking of their diagnostic value, he points out that the appearances described as most typical of Bright's disease have been found in cases of cerebral tumour, leucocythæmia, and meningitis, and he concludes that they are not sufficiently characteristic to allow of a diagnosis being based upon the retinal changes alone. He appears to mistrust observations in which the occurrence of the retinal phenomena has preceded albuminuria. He remarks that Wagner found, out of 157 cases of Bright's disease, 18 in which there were changes visible to the ophthalmoscope, and only 10 of them exhibited changes such as are attributed to albuminuric retinitis. The author of the paper, in examining 90 cases, detected white patches or dots in the retina in 15, but in 3 the appearances were not characteristic. In only 2 cases was there the stellate appearance of the macula. The paper, which is brief, but, on the whole, to the point, and worthy of perusal, concludes with an account of the microscopical characters of these retinal changes.

THE CANAL BOATS ACT.

WE find by a perusal of this Act, just published, that the cubic measurements specified as the minimum cabin space to be allowed to each person were struck out altogether in the passage of the Bill through the House of Lords. The Act requires the Local Government Board to fix "the number, age, and sex of the persons who may be allowed to dwell in a canal boat, having regard to the cubic space, ventilation, provision for the separation of sexes, general healthiness, and convenience of accommodation of the boat." We are not aware whether or not the medical officer of the Board was consulted as to the drafting of this measure, but it is to be hoped that the opinion of this officer will be taken about the cubic space &c. when the required regulations are framed. The Merchant Shipping Act of 1867 requires in all registered vessels for every seaman a minimum space of seventy-two cubic feet, and of twelve superficial feet measured along the deck. The Select Committee on the Canal Boats Bill considered, curiously enough, that forty cubic feet was enough for each person living (sometimes all the year round) in a canal boat. But these figures were very wisely withdrawn when the Bill again came before Parliament, and the figures are now left to the discretion of the authorities at Whitehall.

SOUTH AFRICA.

THE recent annexation of the Transvaal, and the somewhat stirring events that immediately preceded that important event, has brought our South African colonies into bold relief, and is doing a great deal to stimulate emigration in that direction. It may be well, therefore, at this juncture, to remind our readers that the climatic advantages of Cape Colony and the surrounding country are still too little known or too little appreciated. The recently acquired territory has a delightful climate, and both at Pretoria, the capital, and at Potchefstroom, the other chief town, there are likely to be good openings for those of our cloth who wish to colonise. But we would direct attention to the advantages of the Cape to persons who, on account of incipient phthisis, desire to miss one or two English winters. The speed of the mail steamers, both from London and Southampton, is now so much improved that an average passage does not exceed twenty-two or twenty-three days, and the vessels are second to none in liberal feeding and generally comfortable arrangements. Most of our leading physicians pronounce Bloomfontein, in the Orange Free State, the proper town to go to, and indeed it appears to be the only town in South Africa that finds a place in etiological prescriptions. But there are many other places that are well worthy of notice. It is undoubtedly prudent to avoid residence in Cape Town, as it is hot and dirty, and the municipality wants sorely the assistance of a medical officer of health. But the suburb of Wynberg is a charming locality, and should be used by invalids as a sort of half-way house, if they have definitely elected to proceed to the upland districts. It is within easy distance of Cape Town, with an infinitely better climate; and, indeed, pulmonary cripples who can afford to spend a winter abroad, but cannot compass an expensive inland journey and residence, might live at this village from November to April, for one winter or more, with a very good hope of arresting lung mischief. Until roads and railways are fairly opened out, it is cruel to prescribe Bloomfontein or any of the upland districts, unless it be for the exceptionally well-to-do, or for those who are really in the incipient stages of disease. The roads are bad, being in many places mere tracks, and both food and accommodation are of an exceedingly rough description. But we may safely predict for South Africa a prosperous future as a sanatorium if the Colonial Government will progress rapidly with their chief highways, and try to make their capital town a little less redolent of unsavoury smells.

INFANTICIDE.

THERE is much reason to fear that infanticide of the passive variety—that is, letting children of tender years and weakly habits languish and die of neglect and inanition—is exceedingly prevalent. It is unfortunately difficult to bring this form of crime home to the perpetrators; and, to the shame of human nature, it is not regarded in all its heinousness by those who would shrink from the commission of murder or even direct cruelty. Life is not priced at its full value in the case of a sickly child. Among the struggling poor there is a blunted sensibility and a superstitious belief in some vague kind of destiny which qualifies but does not excuse the neglect of obvious precautions to preserve life and ward off the evils that beset and threaten it. The existence of this debased and debasing habit of thought and feeling affords a nidus in which infanticide, properly so called, grows like an evil weed and poisons the lower strata of the community. We do not mean to allege that the poorer classes are less fond of their offspring than those above them; the reverse may perhaps be the fact; but it is expedient, and even urgently necessary, that something should be done to check the too common practice of allowing children to die for want of food and medicine in the early days and months of their little lives. The coroner of Macclesfield has drawn attention to the subject in forcible terms. It is imperatively needful that more than words should be brought to bear upon what is, in truth, a stupendous and growing evil.

HOP-PICKERS.

THE hop-picking season has again fairly commenced, and it is satisfactory to know that in the county of Kent and elsewhere definite arrangements are now made to give the pickers some sort of decent lodgings during their temporary stay near the grounds. An association has been formed at Farningham, which has now existed a couple of seasons, for the express purpose of organising suitable lodgings. The agents of the association have met the special trains, prepared with gratuitous information as to quarters, &c., and the ladies of the neighbourhood have made some arrangements for the girl workers. In some

instances, the various barns on the homesteads have been partitioned off for families with rick-cloths, and it is evident that the sanitary and social condition of the migratory body has much altered for the better, as evinced by a marked improvement in the class of persons who go down to "pick."

EXCRETION OF MERCURY.

DR. E. W. HAMBURGER gives an account in the *Prager Med. Wochenschrift* (No. 4, 1877) of some experiments he has made on patients who were employing mercurial suppositories, in regard to the elimination of the mercury from the system. In seven out of eight cases he discovered the metal in both the urine and the milk. It was always discovered in the urine, but not in the milk of those who were treated by infrication of mercurial ointment during lactation, though it had previously been discovered in the milk of these same patients when the mercury was administered in the form of suppositories. Abundant evidence of the presence of mercury was found in the fæces of a patient who was being treated by infrication, and there appeared to be some connexion between the amount eliminated and the activity of the liver. The method of analysis was one adopted in Huppert's laboratory in Prague, and was essentially an electrolytic process, which is so delicate that a 1-4,000,000th is distinctly perceptible, whilst only 1-500,000th can be recognised by means of hydrogen-sulphide.

NURSING.

A MEMORIAL, very influentially supported, has recently been presented to the Lord Chancellor, having reference to the administration of the Royal Hospital of St. Katherine of the Tower. This old charity was originally instituted in part for the purpose of maintaining a body of so-called "sisters" for the duty of nursing the sick poor within the precincts of the district, and these nurses have always formed part of the permanent establishment. The memorialists urge the desirability of appropriating a portion of the funds of this rich charity to the foundation of a nursing association in the east of London; and state further that, in the event of such a step being taken, the Metropolitan and National Nursing Association is prepared to undertake the supervision of the home, under such rules as may be deemed suitable. The memorial is signed by the Duke of Westminster, the Earls of Glasgow and Lichfield, Sir Sydney Waterlow, Miss Nightingale, Dr. Acland, and many others, most of whom are interested in the Nursing Association.

COLONIAL DEGREES.

THE *London Gazette* of the 24th ult. contains an official notification to the effect that Her Majesty has granted letters patent declaring that the degrees of Bachelor and Doctor of Laws and of Medicine hereafter to be granted or conferred by the University of the Cape of Good Hope shall be recognised as academic distinctions and rewards of merit, and be entitled to rank, precedence, and consideration in the United Kingdom and in the colonies and possessions of the Crown throughout the world as fully as if the said degrees had been granted by any University of the said United Kingdom.

CHOLERA.

A TELEGRAM from Alexandria, dated the 23rd August, announced that a French man-of-war, the *Correze*, from Saigon, bound for Suez, had passed Aden with cholera on board. Fifty of the crew, it is stated, had died, and 130 were sick. If this information be correct, we must go back to some of the earliest facts of the great epidemic extension of cholera of 1865 for parallel instances of cholera on ship-board in the Arabian Sea. The first recorded facts in the epidemic of 1865 were the occurrence of cholera off the coast of South Arabia on the pilgrim ships the *North-Wind* and the *Persia*, both from Singapore and bound for Jeddah. Fifty-two deaths from the disease were recorded in the former ship, and ninety-three in the latter. The history of the outbreak on board the *Correze* may, when made public, help to a clearer understanding of the outbreaks on the *North-Wind* and *Persia*. The *Correze* has been put in quarantine on the Arabian coast by the Egyptian Board of Health.

COFFEE AS AN ANTIDOTE TO STRYCHNIA.

DR. ATTILIO LELLI having met with a case in which a large dose of strychnia was administered in coffee without fatal consequences, was led to institute some experiments to determine whether it possessed an antitoxic power against this drug. The animals employed were rabbits, and by comparative trials he found that a dose of five centigrammes proved fatal in a short space of time; when the same or a larger dose was given in a very strong infusion of coffee, he found that the coffee either acted as a complete antidote in preventing the poisonous effects of the strychnia, or that it materially diminished the violence of its action. The details of the experiments are given in the *Rivista Sperimentale di Freniatria*, edited by Prof. Carlo Livi, of which the first Fasciculus of the third volume has just been issued.

THE TREATMENT OF SCIATICA.

DR. FLEMMING gives, in the *Berlin. Klinische Wochenschrift*, the results of his experience of forty cases of sciatica by means of the sand-bath. The patient is placed in a kind of trough, and the affected limb is surrounded by sand, at a temperature of 100° Fahr. or more, for half an hour; after this, a warm-water bath is administered. Recovery is stated to take place, upon the average, after twenty-four sand-baths.

TYPHOID fever is stated to have broken out at Bedale, in Yorkshire, and to be extending there in so serious a form that the market usually held in the place has been removed temporarily elsewhere and a proposed meeting of the Richmondshire Agricultural Association postponed. It is noteworthy that, in the current reports which have appeared in the press of this outbreak, no reference is made to the measures which the local authority may have taken to limit it, and that they are conceived in the spirit which looks upon such irruptions of disease as "inscrutable visitations of Providence." Meanwhile, it may be inferred that possibly the closure of a single well, or of some other source of water-supply, would have put a stop to the mischief!

THE Commissioners of Sewers for the City have advertised for tenders for the removal and utilisation of the meat, poultry, offal, &c., condemned in the City as unfit for human food. The effectual disposal of this refuse has for some time taxed the ingenuity of the Commissioners, and it does not appear that the question is yet solved satisfactorily. An enormous quantity is now condemned every week, as the City includes within its limits all the chief meat, poultry, and fish markets of the metropolis.

QUININE is scarce, both in England and elsewhere. A merchant captain, recently arrived from Mauritius, states that when he left the island, some three months since, there was great difficulty in obtaining the drug, which was then selling at a guinea an ounce.

THE peril involved in the habitual use of hydrate of chloral has received another illustration in a case reported in the daily press of Saturday last. A gentleman, aged apparently about forty, was found dead one morning, at the Nelson Coffee-house, New-cut, Lambeth, where he had lodged for the last three months. The deceased is said to have been an army surgeon, and to have been subject to sleeplessness, to remedy which he resorted to the employment of chloral-hydrate. A verdict of "Death by misadventure" was returned at the inquest held on the body.

THE mortality in London last week was at the comparatively low rate of 18·6 per annum, the 1261 deaths being 245 less than the average of the corresponding week of the last ten years. The seven zymotic diseases accounted for 260 of these deaths, of which 11 were referred to small-pox, 29 to measles, 24 to scarlet fever, 2 to diphtheria, 17 to whooping-cough, 19 to different forms of fever, and 158 to diarrhœa. The fatality of each of these diseases, with the exception of scarlet fever, showed a marked decline on that of the previous week.

THE Vestry of Kensington, according to a report in the *Metropolitan*, are agitating for the removal of the Fulham Small-pox Hospital, because it is situated between the athletic-grounds at Lillie Bridge and the Stamford Bridge grounds of the Athletic Club, and is also bounded on one side by the West London Extension Railway.

A BARQUE has recently arrived in the Thames from Mauritius with three cases of scurvy on board, which are now under treatment in the Seamen's Hospital. The medical inspector of the Board of Trade is making an inquiry into the circumstances, and his report will shortly appear.

ACCORDING to returns furnished by the engineers of the Metropolitan Board of Works, the average daily quantity of sewage pumped into the Thames during the past week was 268,839 cubic metres at Crossness, and 369,863 cubic meters at Barking, equivalent to about as many tons in weight.

Correspondence.

"Audi alteram partem."

POST-PARTUM HÆMORRHAGE AND ITS TREATMENT.

To the Editor of THE LANCET.

SIR,—There is an interesting article in your last issue on this subject by Dr. Brisbane, and he speaks of the success resulting from the use of the local application of perchloride of iron to the uterine cavity. I also can testify to its success, and have not met with the ill-results which are said to occasionally follow its use. But I wish to speak of what has proved in my hands an equally efficacious means of arresting post-partum hæmorrhage, and which can be used more quickly than the perchloride, besides being more cleanly. It is no new, but certainly a true remedy, and, knowing and having tested its inestimable value, I only wonder that obstetricians do not use it more. My plan is—and there is no novelty in it,—immediately flooding commences, to inject subcutaneously a solution of five grains of Bonjean's ergotine in glycerine and rose-water, and I now never go to a confinement without taking my hypodermic syringe and this solution.

To give ergot or ergotine by mouth is simply to waste time. Barnes, in his "Obstetric Operations," clearly explains why. But its hypodermic administration is another matter, and has in my hands, as yet, proved unfailing in arresting hæmorrhage. Should the first insertion be insufficient, another must be administered in a quarter of an hour, and then I should resort to the perchloride if the loss continued; but as yet I have not met with a case requiring more than two doses.

In the hæmorrhage following abortion hypodermic ergotine is equally valuable. One such case I shall never forget. It was that of a poor ignorant woman who had been reduced to the most pitiable state of weakness and pallor by hæmorrhage following the abortion of twins some three weeks before I saw her. She had taken all the recognised styptics, but the bleeding continued. One ergotine injection checked the flooding to such an extent that next day she said "only coloured water had come from her." A second dose was then given, completely arresting the hæmorrhage, and on the third day she was, so far as the flooding went, cured. She wondered how *vaccination* could have cured her!

This treatment does not do away with the necessity for compressing the uterus and attending to all the important minutiæ of the lying-in chamber; and, should all fail, the iron treatment can still be resorted to.

I am, Sir, yours, &c.,

Melksham, Wilts, August 25th, 1877. S. GROSE, F.R.C.S.

To the Editor of THE LANCET.

SIR,—The subject of Dr. Brisbane's article, in your last issue, is a very interesting one to most of us.

Last year it was my good fortune to assist a very excellent obstetrician, Dr. Ricketts, of Birkenhead, in his practice, and it is his method of treating post-partum hæmorrhage that I wish to bring under your notice. Our results were so satisfactory, and the means adopted so simple, that I shall not apologise for writing a few words on such a well-worn theme. Perhaps the treatment is not new; at all events, I never before heard or read of it.

I allude to the injection of brandy (one to two ounces) into the uterus. Failing this, although in most houses one finds brandy, spirit of wine, slightly diluted or not, answers very well; and, should a syringe not be at hand, rag or sponge saturated with the fluid may be introduced.

Not only did this treatment stop the bleeding, but the finger on the pulse told a tale of reinvigoration from absorption (?), free from the disadvantages too often attending the administration of stimulants by the mouth at such a time—viz., increased heart-action and renewed loss of blood.

So far as I know, there can be no objection to its use, and it appears to me a gain that there is no destruction of tissue, as in the case of injection of perchloride of iron. This drug checks bleeding effectually; but what of the risk of subsequent septicæmia at the time of separation of the dead tissue, broken-down clot, or what not? True, the iron is antiseptic, but does it, under such circumstances, retain this property indefinitely, and in the face of the continued excretion accompanying the separation of such *débris*?

I am, Sir, your obedient servant,

H. F. BAILEY, M.R.C.S.

The Asylum, Ticehurst, August 28th, 1877.

"HOSPITAL MORTALITY."

To the Editor of THE LANCET.

SIR,—In reference to this subject, at present under discussion in your pages, I believe that it is very easy, from the general statistics of hospitals, from the number of beds, patients, and mortality for the year, to arrive at conclusions very erroneous, but certainly gratifying to the medical officers in charge. I send you some facts to establish this. They are derived from the records of one of those hospitals towards the elevation and improvement of which you have done so much; and as the conditions for admission, the class of patients, and diseases, have been somewhat similar during the various years, the statistics I furnish may prove as instructive as they are striking.

In 1869, when first appointed medical officer, my daily average number of patients was about 70 to 80, and my infirmaries

were somewhat after the old workhouse type. In 1870 new hospitals were erected on the pavilion system, with accommodation for 220 beds. The admissions have gradually and steadily swelled, and on Aug. 4th, 1877, the official number of sick was—males 94, females 90, besides 40 male and 53 female imbeciles. But though the number of sick has increased, my death-rate has not increased, as you will see from the following table, taken from the workhouse register of deaths:—

				Deaths.
March 25th, 1868,	to March 25th,	1869	...	128
,, 1869,	,, ,,	1870	...	119
,, 1870,	,, ,,	1871	...	132
,, 1871,	,, ,,	1872	...	110

In 1871–72 small-pox was prevalent, and the daily average number was 120.

				Deaths.
March 25th, 1872,	to March 25th,	1873	...	130
,, 1873,	,, ,,	1874	...	124
,, 1874,	,, ,,	1875	...	125
,, 1875,	,, ,,	1876	...	111
,, 1876,	,, ,,	1877	...	110
,, 1877,	to August ...	...	...	55

If I were engaged in a controversy, I might vaunt my statistics before my opponent as a proof of the superior efficiency of my hospital arrangements, of better nursing, and of better medical attendance, and I might lay the flattering unction to my soul that I deserved credit for the lowering of the death-rate and for the proportionate saving of life. But I should never think of doing so, as I know there is an inherent fallacy in the value of such statistics, and as the similarity of death-rate may be explained on simpler, less egotistical, but equally satisfactory grounds.

There is also another danger to be guarded against in estimating such statistics—that is, when they are applied to the consumption of wines and spirits in poor-houses, and to their relative value and effect in diminishing mortality. To enter into these questions at fuller length would take up too much of your valuable space, but perhaps you may allow me to return to the subject.

I am, Sir, yours faithfully,

TH. M. DOLAN,

North Parade, Aug., 1877. Med. Officer, Halifax Union Infirmary.

To the Editor of THE LANCET.

SIR,—Dr. Greenfield, in his letter to THE LANCET of August 25th, suggests that it would be advantageous to compare the statistics of excision of the knee, as performed at St. Thomas's, with similar statistics from other hospitals, and he quotes 53 cases with 14 deaths (a percentage mortality of 26·4) as a result, which he considers exceptionally good. At the Leeds Infirmary, since the opening of the new building in 1869, there have been performed 44 operations for excision of the knee, with 4 deaths, making a percentage mortality of 9·09.

Dr. Greenfield further suggests that the low death-rate for amputations (19 per cent. in Leeds, against 37·87 at St. Thomas's) may be due to the fact that "in a manufacturing town, and where the number of primary amputations is very large, a considerable number must be upon young and healthy persons injured by machinery accidents, whereas in London many of the accidents occur either in intemperate persons, often as a result of intemperance, or in the feeble and aged."

Surely this explanation will not hold good. Young and healthy persons are injured by machinery in London, and both in London and Leeds people meet with accidents on railways. It yet remains to be proved that the inhabitants of the metropolis are more intemperate than those of large manufacturing towns, while it seems somewhat far-fetched to suppose that the feeble and aged are more imprudent or more unfortunate in London than in Leeds.

Even if Dr. Greenfield's explanations on the subject of amputation mortality can be taken as correct, they are hardly sufficient to account for the great difference between the death-rates of excision of the knee at St. Thomas's and at Leeds.

I am, Sir, your obedient servant,

MARK H. H. VERNON,

August 25th, 1877. House-Surgeon, Leeds General Infirmary.

To the Editor of THE LANCET.

SIR,—I have again to complain that Dr. Greenfield criticises my book without having read it. "Why," he asks, "does not Mr. Tait take some other serious operation, such as excision of the knee, for comparison?" For reasons which Dr. Greenfield ought to know, excision of the knee would be a worthless basis of comparison; but if he will buy a copy of my book and read it from page 123 to the end he will find that I take ovariotomy as another basis of contrast, because its value is exactly known, thanks to Mr. Spencer Wells' accuracy. He will find that the results there again are against St. Thomas's, for whilst the death-rate in the Samaritan Hospital is somewhere about 28 per cent. (less now I believe), that in St. Thomas's is nearly 63.

Unless Dr. Greenfield can show that the excessive mortality in St. Thomas's is due to age, intemperance, or any other extrinsic cause, I trust he will make no more unsupported statements, for I am too busy to answer them.

I am, &c.,

Birmingham. LAWSON TAIT.

*** The tone of Mr. Tait's letter does not seem to us to be such as befits a serious discussion like the present. Dr. Greenfield complained, and we think with justice, that serious charges had been made by Mr. Tait against the administration of St. Thomas's Hospital, which were unfounded, and could not be seriously maintained. Mr. Tait has not withdrawn, or attempted to substantiate, his statements, and the method of controversy which he has chosen to adopt convinces us that further discussion of this kind could only result in recriminations, which would be of no scientific value. The discussion must for the present be considered as closed.—ED. L.

THE ARMY MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—It is somewhat disappointing not to find in your number of August 18th a further section of the promised history of the Army Medical Department undertaken by your correspondent, accepted to be well versed in it. Yet it need not be necessary to postpone comment on the first portion as you published it.

It is to be feared that many will think your historian to be not altogether free from the influences of bias and partiality, which often lead historians, not few, to one side of truth only, and which virtue is said to be many-sided.

I feel assured that loyalty to your weekly Correspondence motto will induce you to give insertion in THE LANCET to one or two observations I beg to offer.

Your correspondent's faith is evidently in the doctrine of selection, simple, pure, and, it may be inferred, wide—a faith at least theoretically hopeful. The late Mr. Alexander, the first armed with the halcyon warrant of 1858, at once fired off a great gazette to the administrative ranks of his department, but it is well known that the result of his studied choice proved such as not to induce that practical man to repeat the experiment of selection as his system. Why? Because subsequent events must have been convincing that a great parity of merit, speaking broadly, pervaded his ranks, and that instances of transcendant qualities were not of number or degree to warrant invidious supercession of men who had efficiently and faithfully performed their duties, and merited the reward of long service by promotion.

Mr. Alexander's critical experience in this could not, I presume, with reason, be set aside by his two immediate successors, who appeared to have retained the right of selection and exercised it in certain known instances, and when occasions of special service prompted and demanded.

As your correspondent, in my interpretation, has been rather sweeping in his assertion as to the service having suffered by promotion on the abstract system of seniority, even in the barest instance it may possibly have exceptionally been, I deem it not less just than generous, having personally known and served with many of the men in question he may have included in his own perceptive list, to protest against illiberal imputations.

But in this age of speed in all things, to the laid-aside place previous Warrants may be similarly consigned. We have now the Darwinian one of 1876, and it will be interesting to note the results, public and personal, of its constitution of selection absolute.

In conclusion, you properly complimented the Director-General lately on the passing of the Unification Act to its full strength, and the public may well be congratulated on it. Like many other Acts of a public policy, it had to drag its slow length along through obstructive legislation. Did war overtake us in these times of European anxiety, to take the field under the old system of regimental hospitals would be tantamount to doing so with Brown Bess.

I am, Sir, your obedient servant,

August, 1877. ONE OF MR. ALEXANDER'S SELECTED.

CASES OF OSTEOTOMY.

To the Editor of THE LANCET.

SIR,—I have read with much interest the report, given in your issue of Aug. 18th, of four cases of osteotomy, the operation having been performed in each case by Mr. Thomas Jones for the relief of rachitic curve of the tibia.

The value of this operation in cases where the curved bones have become consolidated and have lost all elasticity is very generally appreciated, and for such cases osteotomy is the recognised mode of treatment; but this consolidation of the bone never occurs before the age of four years, and in children under that age the deformity is easily reduced by the use of properly applied splints. I have treated a large number of these cases, and will briefly describe the mode of treatment adopted. The person in charge of the case is instructed to douche the legs every morning with cold water, dry them with a rough towel, and afterwards well rub them with the hand, for the purpose of promoting free circulation in the limb. The bones are then manipulated in the following manner. Suppose the left leg to be the object of attack, and that it is curved outwards, the leg is grasped with the right hand just above the most prominent part of the curve, so that the ball of the thumb rests against the prominence itself; the left hand then grasps the lower part of the leg, around the malleoli, and the bone is gently but firmly bent towards its natural position, then allowed to relax and again straightened, this exercise being continued for ten minutes. Straight splints, reaching from above the head of the tibia to a little below the foot, are worn night and day; the splints should be of solid wood, hollowed so as to be concave from side to side, nicely padded, and firmly bandaged to the inside of the leg. The flat pieces of wood cut out by a carpenter, which, when roughly padded with tow and covered with linen, are honoured with the name of splints, are quite useless; they slip round the leg if not bandaged on very tightly, and when so bandaged, from pressing only on one small point of the head of the tibia above and also of the internal malleolus below, they to a certainty produce sloughs at those places.

Cases 1, 3, and 4 reported by Mr. Jones would, I believe, have yielded readily to treatment such as above described; certainly I have succeeded in relieving cases of greater severity than is the one of which an illustration is given. With regard to the illustrations of this case it would have been more satisfactory had "the cure" been shown with the child in the erect position. It is a well-known fact that in cases of genu extrorsum the deformity is rendered much less apparent by flexing the leg on the thigh.

I am, Sir, yours obediently,

FREDERICK R. FISHER, F.R.C.S.

Grosvenor-street, August 20th, 1877.

THE ASTLEY COOPER PRIZE.

To the Editor of THE LANCET.

SIR,—As one of the candidates for the above I was delighted to read the remarks concerning the late award in your last issue. Although I have not the pleasure of knowing any of the physicians and surgeons of Guy's Hospital, nevertheless, considering the trouble they have taken in reading the various essays, I believe they were actuated by the purest and best of motives when they awarded the prize to the essay bearing the motto "*Facta non verba*." At the same time I do not believe for one moment they had any idea that the envelope, when opened, would be found to contain the names of *two* gentlemen—viz., Drs. Eulenberg and Guttmann. Had they been aware of this fact, although the essay may be (and, considering joint authorship, ought to be) the best, I think, knowing, as they must do, the exact wording of the late Sir A. Cooper's will, they, in justice, would not have awarded the prize as they have done. I have taken legal opinion on the matter, and am assured that the prize must be awarded to one and not to two authors. The length of time the judges have taken before they awarded the prize—viz., nearly eight months—distinctly points to two important facts: (1) That there must have been a great number of essays to decide upon; or (2) that the competition must have been very close. At present it is my intention to dispute the case in a legal court, and hope the other candidates will join in the expense. I do not wish to cast the slightest imputation upon any of the gentlemen who have judged the essays; at the same time, considering the time, trouble, and expense I have been put to in writing my essay, making my microscopic preparations, and engraving the same on stone, &c., and to find, at the last moment, that a *German company* has been formed to write an essay that ought to have been the work of one, is, to say the least, disheartening. Entering into the competition with the idea that the award would be to the best *author* (not *authors*), I am informed that I can legally claim loss of time, &c. &c., if it is decided to persist in giving the prize to Drs. Eulenberg and Guttmann. I hope, Mr. Editor, you will kindly publish this letter without my giving my name and address, as, until the present question is settled definitely, I do not think I should be justified in giving either; at the same time, if any of the other candidates should wish, with me, to dispute the case, if they will, through the medium of THE LANCET, state so, I will put myself in communication with them.

I am, &c.,

August 28th, 1877. JUSTICE.

POOR-LAW MEDICAL WORK.

To the Editor of THE LANCET.

SIR,—As the letter of your correspondent, "ex-Poor-law Medical Officer," touches on a subject on which I have written and thought very much, perhaps you will allow me to make a few remarks on it. He very justly exposes some of the evils which have brought Poor-law medical work into disrepute—viz., false shame about doing work which is paid for, and delegation of duty to unqualified assistants.

I do not consider that the medical officer who attends himself, personally, loses any caste, or that his social position is thereby affected. I speak for myself, and I am a poor-house medical officer. Before entering on my duties I had read "THE LANCET Commission on Workhouses," and so convinced was I by it of the great field of usefulness and of knowledge opened out in a workhouse infirmary, that when I accepted my appointment I made it my object to assist in the improvement you had commenced, to attend my patients in the same way as if I were physician to a voluntary hospital, to introduce system and method into the working, so that my infirmaries might favourably compare with any hospital in England. I have done so with both success for myself and benefit for my patients. I recognised, with you, that "our State hospitals are our workhouse wards," and that there is little difference between the pauper who seeks the aid of a voluntary charitable institution and the pauper who is compelled through the exigencies of sickness and necessity to enter a poor-house infirmary. The diseases are the same, and, moreover, I was paid for doing the same kind of work which the hospital physician was doing for nothing.

I never felt ashamed of my appointment, and I never despise my patients; and for this feeling I certainly must thank the writers who, with an earnestness and thoroughness worthy of the highest praise, let in such a flood of light on the condition of our workhouses, and who have been the means of inducing boards of guardians to erect infirmaries worthy of the object for which they are intended. This little book should be in the hands of every workhouse

medical officer as an incentive to duty. You must preach the same tenets again, for truth, in the lapse of time, is apt to be forgotten. Your ideas have, in many parts of England, become realities, and we have now the groundwork for a national system of hospitals, which may be made of incalculable service to medical science and humanity.

It remains for the medical officers themselves to elevate their position; they have it in their power to do so by casting aside old traditions, working on the newer and higher motives you have pointed out, and remembering that though they may not immediately receive their reward, they are acting like the husbandman who plants trees for the benefit of a future age.

Yours, &c.,

August 27th, 1877. A WORKHOUSE MEDICAL OFFICER.

THE MURIATE OF CALCIUM.

To the Editor of THE LANCET.

SIR,—Dr. Bell, of Glasgow, contributes to THE LANCET of August 25th a paper on the muriate of calcium as a therapeutic agent. I quite agree with Dr. Bell in the high estimate which he has formed of the value of that drug, but I think he might have credited his predecessors in the medical profession with having laid down clearly the principles which should regulate its administration. In 1871 or 1872 Dr. Warburton Begbie read an exhaustive paper upon the subject to the Edinburgh Medico-Chirurgical Society, in which he showed that the drug was one of old and well-established reputation, which had been temporarily laid aside on the introduction of cod-liver oil, iodine, and other new remedies for strumous and similar diathetic disorders. The discussion which followed the reading of Dr. Begbie's paper showed that the older Edinburgh practitioners were fully cognisant of the great value of the chloride of calcium, so that Dr. Bell's opening remarks that the drug is "a salt which has been *till quite recently* thought of such little value in the treatment of disease," &c., is not an accurate statement of the facts. If the muriate of calcium is not to be found as a therapeutic agent in the more recent text-books on Materia Medica, it is fully considered in the older works, such as "Christison's Dispensatory," and in "Neligan," who speaks of the former frequency of its employment and the recent neglect of it.

As Dr. Bell's own name is the only one which appears in his paper, perhaps you will think I have been justified not only in confirming his remarks as to the value of chloride of calcium, but in giving to the drug a still further recommendation by adducing evidence that distinguished physicians have long been convinced of its value. Dr. Warburton Begbie's paper was published in the *Edinburgh Medical Journal*.

I am, Sir, your obedient servant,

ROBERT LAWSON, M.B.

Middlesex County Lunatic Asylum, Banstead Downs, near Sutton, August 27th, 1877.

COTTON-WOOL TAMPONS.

To the Editor of THE LANCET.

SIR,—It has occurred to me during my recent visit to the Gynæcological department of the London hospitals, that in the treatment of uterine displacements, congestions, and vaginal catarrhs, the use of cotton-wool tampons is not so general as, in my opinion, it deserves to be. Intra-uterine stems, pessaries in all their various forms, &c., often prove irritating, and, instead of subduing, frequently increase the congestion of the surrounding mucous membrane.

Injections, notwithstanding their beneficial effect, are mostly insufficient through the shortness of contact of the injected liquid with the diseased parts.

The regular use of cotton-wool tampons, on the contrary, secures a more effective treatment through the following two advantages:—1. The tampon forms a support sufficient to keep up the womb without exercising any undue pressure on the vagina, os uteri, bladder, or colon. 2. When dipped in an astringent solution, such as chlorate of potash, alum, tannin, perchloride of iron, diluted acetic acid, &c., it has a continued contracting effect on the relaxed parts.

It has occurred to me that there is a want of a cheap and practical tampon-holding instrument, by which every woman, whatever be the amount of her nervous irritability, or however unskilled her hands, would be able to introduce, without the slightest difficulty, a tampon to the laquear vaginæ, touching the os uteri.

An instrument is manufactured in France, after my design, in olive-wood, which I have employed for years in my practice, and which, I believe, fulfils the above conditions. Believing it might prove useful to my English colleagues, I have given the model during my stay in Manchester, where I assisted at the meetings of the British Medical Association, to Messrs. Wood and Co., surgical instrument makers, King-street, Manchester.

I am, Sir, your obedient servant,

Nice, France, August 27th, 1877. HENRY LIPPERT, M.D.

THE METROPOLITAN WATER-SUPPLY.

To the Editor of THE LANCET.

SIR,—In the remarks contained in your issue of the 18th inst. on the above subject reference is specially made to the "novelty" of the scheme proposed in the conjoint report of Sir J. Bazalgatte and Messrs. Bramwell and Easton for obtaining an efficient supply of water for the metropolis. Will you kindly permit me to draw attention to my report on the health of Wandsworth for the year 1866 (copy sent herewith, and marked at p. 18), in which it will be seen that in that year the Metropolitan Board of Works issued a circular inviting the opinions of the several medical officers of health on the subject, and that my reply to that circular essentially contains the plan now suggested by the above-named engineers.

I am, Sir, your obedient servant,

GEORGE EDWARD NICHOLAS, M.D.,
Medical Officer of Health for Wandsworth.

Church-row, Wandsworth, Aug. 24th, 1877.

Obituary.

DR. EVASIO ADAMI.

IT was our melancholy duty last week to record the death of Dr. Conneau, and this week we have the not less painful task of announcing the decease of another Court physician, Dr. Evasio Adami. This distinguished *savant* and citizen died after two months of a cruel malady at Turin in the early morning of Friday, the 24th ult. He was on the verge of his fiftieth year, but in point of mental and physical vitality might have been still younger. He was the son of a physician who had already earned the confidence of the Royal House of Savoy, and, on succeeding his father, he so enhanced the esteem he inherited that King Victor Emmanuel made him his first body physician, created him Commander of Saints Maurice and Lazarus, and honoured him with frequent appeals to his judgment in other questions than strictly professional ones. No sooner was his illness pronounced to be hopeless than His Majesty hurried to his bedside, and administered all the comfort which his brave and tender nature could command.

Dr. Evasio Adami had few faults, and no enemies. His was one of those enviable idiosyncrasies which seem perfectly balanced, and (in the good sense) self-sufficient. In his profession he was a keen observer and a skilled prescriber; as a citizen he was eminently public-spirited, and an ardent promoter of the sciences, in a number of which he was proficient; as a husband and father he was truly exemplary. His services to the advancement of the profession by tongue and pen will, ere long, receive fitting record; and his memory will long be cherished by his compatriots of the sub-Alpine capital.

His funeral took place on the evening of the day of his death. The *cortège* started from the Royal Palace, His Majesty King Victor Emmanuel having telegraphed that special honours should be rendered to one who was at once a support and an ornament of his royal household.

JOHN BENSON, L.R.C.S.I.

THIS gentleman died at Adelaide, South Australia, on the 6th of last July. The deceased left Dublin about fourteen years ago, and within a short time of his arrival in Australia was appointed assistant colonial surgeon, which post he resigned on entering into practice at Kensington, near Adelaide. His funeral was of a public character, and was attended by the principal Government officials and by upwards of 3000 mourners. At a public meeting since held the Mayor observed that there was a general desire throughout the town and neighbourhood to keep the memory green of the good man whom they had lost. His deeds of kindness and charity to the poor and the afflicted were known to them all. He was a skilful doctor, a genial friend, and a true-hearted Christian gentleman.

Medical News.

ARMY MEDICAL SERVICE. — The following is a list of gentlemen who were successful for appointments in this Service at the examination held at the University of London on the 13th of August:—

	Marks.		Marks.
Keayes, W.	2240	Barrington, H. E. W.	1606
Crofts, F. W.	2014	Lloyd, O. E. P. ...	1495
Young, P. G.	1928	Smith, R. B.	1495
Beamish, R. T. ...	1851	McLaughlin, H. J. ...	1480
Lundy, A. C. J. R. ...	1785	Grier, H.	1465
Parker, W. A.	1780	Leader, N.	1465
Green, A. P.	1764	Donovan, H. L. ...	1463
Rayne, C. A.	1755	Bell, G. W.	1445
Anderson, J.	1725	Conolly, J. V.	1387
Power, E. R.	1725	Lyle, A. A.	1380
Maguire, D.	1615	Clinch, J. V.	1378
Mulrenan, J.	1600	O'Neill, L. S.	1365
Pedlow, J.	1585	Charlton, H. A. H. ...	1335
Tidbury, J.	1550	Quarry, C.	1315
South J. J.	1515	Hayes, W.	1230

INDIAN MEDICAL SERVICE.—The following is a list of candidates who were successful at the competitive examination held in London in February last, with the total number of marks obtained at the examinations in London and Netley:—

	Marks.		Marks.
* Rogers, T. K.	5613	Bleum, D.	4443
Hatch, W. K.	5382	Mullen, D.	4399
Owen, W.	5380	Taaffe, R. J.	4337
Massani, H. D. ...	5280	Robinson, E. L. ...	4336
Gillies, W.	5090	Nelis, J. A.	4315
Jack, D. M.	5050	Bonton, G. C.	4096
Conry, W.	4991	Smyth, W. B.	4033
Nailer, H. A. F. ...	4915	Chatterjee, N.	3945
Kirtikar, K. R. ...	4830	Crofts, A. M.	3939
Kellie, G. J.	4760	Crofts, J.	3895
Hancock, G. J. ...	4673	Coates, W.	3894
Basu, D.	4635	Blood, J.	3892
Mackenzie, A. W. ...	4608	Dutt, B. L.	3767
Mullane, J.	4471		

* Gained the Martin Memorial Medal.

The following candidates were successful at the competitive examination held at Burlington House on Aug 13th:—

	Marks.		Marks.
Thom, A.	2795	Bennett, C. H. ...	1922
Thomson, S. J. ...	2208	Davidson, D. C. ...	1910
Brander, E. S.	2267	Jervis, H. P.	1845
Manser, R.	2160	Peacocke, H. C. H. ...	1830
Campbell, R. N. ...	2035	Koyaji, B. N.	1820
Emerson, G. A. ...	2033	Thornhill, W. H. ...	1795
Adey, H.	2000	Sargent, A. F.	1775
Chatterjee, P. C. ...	2000	Reporter, M. E. ...	1725
Tully, E.	1980	Robinson, B. H. ...	1710
Street, A. W. F. ...	1960		

APOTHECARIES' HALL. — The following gentlemen passed the examination in the Science and Practice of Medicine and received certificates to practise on the 23rd ult.:—

Bothamley, Richard Broughton, Dorrington, Spalding.
Gimblette, George Hart Desmond, Southsea.
Le Fevre, George, Melbourne, Australia.
Plumbe, Samuel Thomson, Maidenhead.
Seth, Owen, Powis-square.
Woods, John Francis, Bunhill-row.

The following gentlemen also passed the Primary Professional Examination:—

Edward John Havens and Alfred Higgs, London Hospital; Chas. Lucas, Middlesex Hospital; Thomas Mellor, Manchester; Geo. Arthur Roper, St. Thomas's Hospital.

A NEW Industrial Training-ship, the Clio, a screw frigate, given by the Admiralty, and moored off Bangor in the Menai Straits, has been inaugurated by the Duke of Westminster.

MR. ARTHUR WOOD, L.S.A. Lond., of Kirby Moorside (the Deputy Coroner), is a candidate for the Coronership of the North Riding of Yorkshire, vacant by the death of Mr. Ness.

VACCINATION GRANT.—Mr. W. H. BOX, of Chirk, North Wales, has received a Government grant of £17 5s. for successful vaccination in his district. This is the second award obtained by him.

SUPERANNUATION ALLOWANCES have been granted to the following late Poor-law medical officers, viz.:—Mr. J. Browne, West Ham Union, £62 13s. 4d. per annum; Mr. R. R. Welch, Hackney Union, £54 10s.; Mr. G. H. Buxted, Uckfield Union, £50; Mr. W. Eddowes, Atcham Union, £50; Mr. N. B. Turner, Westhampnett Union, £47.

Medical Appointments.

ANDERSON, J. G., L.R.C.P.I., L.R.C.P.Ed., has been appointed Medical Officer for the No. 5 District of the Royston Union, vice Madden, resigned.

BATHO, W., M.R.C.S.E. & L.M., L.S.A.L., has been appointed a Medical Officer to the Salisbury Medical Club and Provident Dispensary.

BERNARD, D. E., L.R.C.P.Ed., M.R.C.S.E., L.S.A.L., Medical Officer to the Barton-Regis Union Workhouse, has been appointed Registrar of Births and Deaths for the Ashley District.

BUDDS, W. T., L.K.Q.C.P.I. & L.M., L.R.C.S.I., has been appointed Extraordinary Physician to the Cork Fever Hospital and House of Recovery, vice Smyth, resigned.

BURROUGHS, T. J., L.R.C.P.Ed., M.R.C.S., L.S.A., has been appointed Medical Officer to the Farnham, Alton, and Hartley District Schools, vice Clark, resigned.

COATES, F. W., M.D., M.R.C.S.E., L.S.A.L., has been appointed a Medical Officer to the Salisbury Medical Club and Provident Dispensary.

COOKSON, A. N., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Chilvers-Coton District of the Nuneaton Union, vice Pitt, resigned.

DAVIES, R., M.D., F.R.C.S.E., has been reappointed Medical Officer of Health for the Newport, Mon., Urban Sanitary District for the ensuing year.

EATON, J. C., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the Ancaster District of the Grantham Union, vice F. Eaton, M.R.C.S.E., L.S.A.L., deceased.

ELLIOT, J., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the newly-formed No. 3 or Bodenham District of the Leominster Union.

EVANS, G., M.R.C.S.E., L.S.A.L., has been reappointed Medical Officer and Public Vaccinator for the No. 7 or Branscombe District of the Honiton Union, Devon.

GOOD, J., L.R.C.P.Ed., M.R.C.S.E., L.S.A.L., has been appointed a Medical Officer to the Salisbury Medical Club and Provident Dispensary.

GORDON, J. H., M.D., C.M., has been appointed a Medical Officer to the Salisbury Medical Club and Provident Dispensary.

GOWING, B. C., M.R.C.S.E., L.S.A.L., has been appointed a Medical Officer to the Salisbury Medical Club and Provident Dispensary.

GROWSE, J. L., M.R.C.S.E. & L.M., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Hildeston District and the Workhouse of the Cosford Union, Suffolk, vice R. Growse, L.S.A.L., deceased.

HIGHET, J., M.B., C.M., has been appointed a Surgeon to the Workington Dispensary, vice Peat, deceased.

KENNY, R. J. D., L.R.C.S.I., L.A.H.D., has been appointed a Medical Officer to the North Dublin Union Workhouse, vice Kirkpatrick, resigned. £150 per annum.

LEE, F. F., M.B., F.R.C.S.E., L.S.A.L., has been appointed a Medical Officer to the Salisbury Medical Club and Provident Dispensary.

LOND, H. P., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Farnsfield District of the Southwell Union, Notts, vice Phillips, deceased.

MACDONALD, J. A., M.D., L.R.C.P.Ed., F.R.C.S.Ed., has been appointed Medical Officer to the Woburn Union Workhouse, vice Veasey, resigned.

MACKAY, A., M.B., C.M., has been appointed Medical Officer and Public Vaccinator for the Parish of Lismore and Appin, Argyleshire, vice Pringle.

MACLEAN, T. E., M.B., B.S., M.R.C.S.E., has been appointed Administrator of Anæsthetics and Registrar to the Royal Westminster Ophthalmic Hospital.

MURDOCH, W., M.B., C.M., has been appointed Assistant Medical Officer to the Perth District Lunatic Asylum, Murthly, vice Daniel, appointed to the Derbyshire Lunatic Asylum, Mickleover.

OLDMAN, J., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer of Health for the Huntingdon Urban Sanitary District, vice Holderness, resigned.

PEACOCK, E., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer of Health for the Chilvers Coton Urban Sanitary District, Warwickshire, vice Pitt, resigned.

PYLE, C. J., M.R.C.S.E., L.S.A.L., has been appointed a Medical Officer to the Salisbury Medical Club and Provident Dispensary.

SMYTH, W. J., M.D., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer of Health for the Shipley Urban Sanitary District, vice Ellis, whose appointment has expired. £90 per annum for three years.

STACK, R. T., M.D., L.R.C.S.Ed., has been appointed a Dental Surgeon to the Dental Hospital of Dublin, vice Ryding, resigned.

TIZARD, H., M.D., M.R.C.S.E., L.S.A.L., has been appointed Admiralty Surgeon and Agent for Weymouth, vice Lithgow, deceased.

UNDERHILL, A. S., M.D., M.R.C.S.E., has been reappointed Medical Officer for the Tipton Urban Sanitary District, at £80 for one year.

WALKER, H., L.F.P.S.G., has been appointed Medical Officer of Health for the Baildon Urban Sanitary District, vice Murgatroyd, whose appointment has expired.

WATERWORTH, E. A., M.D., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer to the Isle of Wight Union Workhouse, vice Beckingsale, resigned.

Births, Marriages, and Deaths.

BIRTHS.

CARTER.—On the 26th ult., at Lenton House, Anerley, the wife of George Roe Carter, L.K.Q.C.P.I., of a daughter.

COOKE.—On the 16th ult., at Woburn place, the wife of Thomas Cooke, F.R.C.S.E., of a daughter.

FLETCHER.—On the 23rd ult., at Camden-road, the wife of John C. Fletcher, M.D., of a son.

GULLAND.—On the 24th ult., at St. Mark's House, St. Heliers, Jersey, the wife of A. D. Gulland, M.D., Surgeon-Major, of a son.

OSBORNE.—On the 23rd ult., at Mirfield, the wife of James Osborne, M.D., of a son.

TOLERTON.—On the 26th July, at Sherston-Magna, Malmesbury, Wilts, the wife of William Ratcliffe Tolerton, M.D., of a son.

TURLE.—On the 26th ult., at Woodside Grange, Finchley, the wife of James Turle, M.D., of a son.

TYRRELL.—On the 26th ult., at Merrion-square North, Dublin, the wife of Henry J. Tyrrell, L.K.Q.C.P.I., of a daughter.

MARRIAGES.

BUCK—WALKER.—On the 27th ult., at the Parish Church, Birstall, by the Rev. F. H. Richardson, W. Elgar Buck, M.A., M.D., of Leicester, to Marian, elder daughter of W. H. Walker, of Birstall Holt, Leicester.

RAVENHILL—CUTLER.—On the 29th ult., at Hall-green, by the Rev. T. H. Ravenhill, M.A., father of the bridegroom, assisted by the Rev. W. Jones, M.A., Thomas Holmes Ravenhill, M.R.C.S. &c., of Bordesley, Birmingham, to Adelaide Anne, second daughter of the late John Walford Cutler, Solicitor, of Birmingham.

SMITH—CHAMPAIN HALL.—On the 11th ult., at St. Peter's Church, Paddington, by the Rev. Thomas Preston, M.A., Vicar of Swaffham Prior, Cambridge, assisted by the Rev. O'Bryen Hodge, M.A., Vicar of the Parish, Edwin Gilbert Smith, M.R.C.S., of Easy-row, Birmingham, to Florence, eldest child of William Champain-Hall, of Grittleton-road, Paddington, and Southampton-street, Bloomsbury. No cards.

SYMNS—JACKSON.—On the 28th July, at St. Matthew's, Upper Clapton, by the Rev. L. E. Shelford, Vicar, assisted by the Rev. J. E. Symns, brother of the bridegroom, and the Rev. F. J. Poole, of St. Mary's, Woodford, E. Montfort Symns, of Kington, Hereford, to Annie, only daughter of the late R. S. Jackson, Esq., Surgeon, of Bere Ferrers, Devon.

DEATHS.

BENSON.—On the 6th July, at Adelaide, South Australia, John Benson L.R.C.S.I., aged 39.

BURKE.—On the 17th ult., at Octagon House, Westport, Francis Burke, L.A.H.D., aged 82.

BURKITT.—On the 23rd ult., at Wicklow, William Robert Burkitt, L.R.C.S.I., Surgeon-Major, late of the 52nd Regiment.

DAVIDSON.—On the 26th ult., at Bogie House, Kirkcaldy, William Gordon Davidson, late Inspector-General, Indian Army, Madras.

DAVIES.—On the 23rd ult., at Eden-grove, Holloway, Louisa Jane, the beloved wife of W. Bowen Davies, L.R.C.P.L., of Brynarlais, Llandrindod Wells, aged 32.

DURRAN.—On the 16th ult., at Fulham, David Durran, M.D., aged 66.

LLOYD.—On the 18th ult., at Carmarthen, William Lloyd, M.B., aged 30.

NESS.—On the 18th ult., at Plymouth, John Ness, F.R.C.S.E., of Helmsley, Yorkshire.

O'DONNELL.—On the 20th ult., at Waterloo, Liverpool, John O'Donnell, M.D., aged 77.

SKRIMSHIRE.—On the 17th ult., at Holt, Norfolk, George Skrimshire, M.R.C.S.E., aged 75.

WILLOWS.—On the 21st ult., at Oakfield-road, Penge, Robert George Edward Willows, M.R.C.S.E., late of Chesterton, Staffordshire, aged 28.

[N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.]

BOOKS ETC. RECEIVED.

C. J. Cullingworth: Catalogue of the Radford Library, Manchester.
F. Bertier: The Spas of Aix-les-Bains and Marlioz.
MacCormac: The Conversation of a Soul with God.
Second Annual Conference on the Health and Sewage of Towns.
Sunday at Home. September.
Leisure Hour. September.
New York Medical Journal. August.
Dr. Mackey: Elements of Physiography.
W. K. Parker and G. T. Bettany: The Morphology of the Skull.
Dr. Emil Fleischer: A System of Volumetric Analysis.
R. Barwell on Curvatures of the Spine.
The Popular Science Monthly. September.
Dr. Millar: Hints on Insanity.
The Monthly Homœopathic Review. September.

ROYAL COLLEGE OF SURGEONS.

THE following report from the Court and the Board of Examiners of the number of candidates who have presented themselves for the Primary and Pass Examinations for the diploma of Member of the College during the collegiate year 1876-77, showing the number who have passed and have been rejected from each medical school during that period, will no doubt be read with interest by both metropolitan and provincial teachers.

PRIMARY EXAMINATIONS.

1876-77.

Medical School.	Totals.	Number passed.	Number rejected.
St. Bartholomew's	119	82·50	36·50
University College	100·50	69	31·50
Guy's	80	70	10
St. Thomas's	60	38·50	21·50
London	42·16	24·3	17·83
St. George's	40·6	26·3	14·3
King's College	33·50	24·50	9
St. Mary's	27·50	18·50	9
Middlesex	24	20	4
Charing-cross	20·6	15·3	5·3
Westminster	11	8	3
Manchester	35·50	23·50	12
Liverpool	30·50	25	5·50
Bristol	23	8	15
Birmingham	21	15	6
Leeds	20	15	5
Sheffield	7·50	3·50	4
Newcastle-on-Tyne	13	9	4
Cambridge	9·50	7·50	2
Dublin	20·50	7	13·50
Belfast	3	3	.....
Cork	2	1	1
Galway	·50	.....	·50
Edinburgh	25	18·50	6·50
Glasgow	4	2	2
Aberdeen	·50	·50	.....
Montreal	3·50	2·50	1
Toronto	3	2·50	·50
New York	1	.....	1
Ohio, Cincinnati	1	1	.....
Laval	·50	·50	.....
Bombay	5·50	4·50	1
Calcutta	2	2	.....
Madras	1	1	.....
Berlin	1	1	.....
Leipsic	·50	·50	.....
Totals	792	546	246

PASS EXAMINATIONS.

1876-77.

Medical School.	Totals.	Number passed.	Number rejected.
Guy's	83	68	15
St. Bartholomew's	72	63	9
University College	64·3	51·3	13
King's College	45·50	32·50	13
St. Thomas's	42·6	32·6	10
St. George's	27	24·50	2·50
London	26	19	7
St. Mary's	19·3	14·50	4·83
Middlesex	15·16	11·3	3·83
Charing-cross	7·83	6·50	1·3
Westminster	7·83	3·83	4
Manchester	25	18	7
Birmingham	24	19	5
Leeds	20·3	14·50	5·83
Liverpool	10·16	4·33	3·3
Bristol	9·50	4	5·50
Newcastle-on-Tyne	6·3	2·3	4
Cambridge	3·50	1·50	2
Sheffield	2	1	1
Dublin	9·50	5·50	4
Belfast	2	2	.....
Galway	·50	·50	.....
Cork	·50	.....	·50
Edinburgh	23·16	13·3	9·83
Aberdeen	5·3	4·3	1
Glasgow	1	1	.....
Bombay	2·50	1·50	1
Calcutta	2	1	1
Caracccs	1	1	.....
Liége	1	1	.....
Toronto	3	3	.....
Montreal	3	2·50	·50
New York	1·3	1·3	.....
Ohio, Cincinnati	1	1	.....
Totals	569	432	137

NOTE.—In these respective lists candidates who are indicated by a fraction have received their education at more than one school of medicine.

Notes, Short Comments, and Answers to Correspondents.

THE STUDENTS' NUMBER OF THE LANCET will be published on Saturday next, Sept. 8th. Those gentlemen holding official situations connected with Medical Institutions in the United Kingdom, who have not yet forwarded the necessary information to our Office for publication in that Number, are earnestly requested to send it *without the delay of a single post.*

THE INFLUENCE OF MUSIC ON THE PHYSICAL AND MORAL NATURE.

THE Académie des Sciences Morales et Politiques received, at its sitting on July 18th, a memoir by M. J. Rambosson on the "Specification of the different Influences of Music on the Physical and Moral Nature." M. Rambosson attempts a new application of the theory of the transformation of mechanical movement into psychological and psychical movement, with a view to employing music as a means of curing or mollifying the maladies of body and mind. He passes in review some of the affections on which we can act by means of music, and he tries to explain this action scientifically, as well as the general influence of music on the development and functional play of the moral and intellectual faculties, and on the physiological state of individuals. This general influence may be decomposed into specific influences, and M. Rambosson, by means of this specification, arrives at the following results:—There is, first, a music which acts specially on the intelligence and on the motor nerves; secondly, a music which acts specially on the nerves of sensibility and on the sentiments; thirdly, a music which acts all at once on the motor nerves and on the sensitive nerves, on the intelligence and on the sentiments; this in general is the action which most frequently occurs. M. Rambosson, besides, believes he has discovered, between the effects of music and those of the aliments which modify the nervous system, such analogies that the laws which regulate the one and the other might be formulated in the same terms. We might, according to him, establish a method, in hygiene, in medicine, and the moral sphere, of profiting by these specific influences, above all in the treatment of mental maladies and nervous affections, making allowance, of course, for individual idiosyncrasies. In short, he considers music as an agent at once psychical, phrenological, and therapeutic, capable of performing a considerable part in the phenomena of life, and the employment of which would be susceptible of application according to precise rules based upon scientific principles.

Dr. Vincent Harris's paper shall be published in an early number.

SURGEONS TO EMIGRANT SHIPS.

To the Editor of THE LANCET.

SIR,—It may be useful to draw attention to the mode in which emigrant ships sailing for Western Australia are supplied with medical officers.

In the beginning of February last, being anxious to be off to Australia, I engaged at a few days' notice to sail as surgeon to one of these ships. I was to receive £30 for the voyage to Freemantle, and it was explained to me that the cost of travelling from there to Melbourne, my destination, would be only £8. £5 out of the £30 went as a fee to the gentleman who engaged me, and £5 more had to be expended on medical registration before leaving London. The voyage was a very long one, the ship leaky, and the captain thoroughly disagreeable; but we arrived safely at Freemantle, 110 days out from London.

On getting ashore, I was called a simpleton for engaging to take out emigrants on such easy terms, as it was customary for the surgeon to receive at least 10*s.* a head on all brought alive into port. Then, waiting between two and three weeks in the colony till the mail proceeded to Melbourne, I found that, instead of paying £8 for the passage, I had to spend £17 5*s.* to get to Adelaide alone; from there to Melbourne cost £3 more, so that the entire £30 was expended in bare travelling expenses. A passage in the steerage of any of the small coasting vessels would have cost more than £8.

Another circumstance that caused me much surprise was, that no account of the duties of the surgeon of an emigrant ship was submitted to me, so that, though striving to act in every case as a medical man should under any circumstances, and to the best of my ability, there was necessarily constant uncertainty as to my position and power as medical officer, standing, as the ship's surgeon usually does, between two parties with opposed interests, and glad under the circumstances to encourage any compromise that would be productive of peace. If the surgeon is expected to protect the interests of the emigrants, why is he not told to do so, *especially when they sail at the expense of the Government, and under Government supervision?*

Medical men who may think of accompanying emigrants to Western Australia would do well to scrutinise the terms of agreement for the appointments, and compare them with the terms offered by emigration agents for the other colonies.

I am, Sir, your obedient servant,

Melbourne, July 9th, 1877. A. M.

Juvenis.—The work referred to is called Greek Lessons, by W. H. Morris, third edition, 1874, published by Longmans, Green, and Co. The review appeared in THE LANCET of May 23rd, 1874.

Mr. W. Mole.—We never recommend a special physician or surgeon. Any physician of repute might be consulted with advantage.

"MILK TAVERNS."

THE suggestion made in these columns a few weeks ago, to the effect that it would be useful and remunerative to provide well appointed "Milk Taverns" for the public, has excited great interest and, we believe, already borne fruit. We are informed of some establishments of the class which have been started, and appear likely to thrive, and we hear of others in progress or in contemplation. Attention is specially drawn to a "Milk Tavern" in Bristol, which claims to be the first of the kind in England. We are asked whether a smoking-room should be provided, and the daily papers supplied. Certainly smoking should be permitted in a room or bar set apart for the purpose, and every other convenience of a tavern ought to be included in the arrangements. The object in view is to substitute an innocuous and nutritious beverage for one which is neither harmless nor, as commonly employed, helpful. To ensure success, it is indispensable to minimise the objections which may be urged against establishments of the new order, by meeting every reasonable requirement and gratifying every innocent taste. It is desirable to fulfil two objects—to provide a shop for the supply of refreshment to the casual passer; and an agreeable place of resort for the working man whose only "club" the public-house is, and will continue to be. We repeat the strenuous counsel given in our remarks of August 16th on the subject of "Milk Taverns," and we are even more strongly convinced, now than then, that the enterprise will be socially serviceable, and recompense its promoters.

T. B. J.—The motion in question was a mere suggestion for future legislation on the subject. Canadian qualifications cannot be registered in the present state of the law.

Subscriber.—The gentleman named has been dead some years.

"PRESCRIBING CHEMISTS."

To the Editor of THE LANCET.

SIR,—As the subject of "prescribing chemists" has quite recently been on the *tapis*, and is even now *sub judice*, I am sure you will be glad to receive any facts bearing on this *quæstio vexata*, and I trust that in the following observations I shall contribute something of interest to the profession.

Yesterday morning a man presented himself to me for the first time, requesting me to fill up a certificate *for* his Lodge (of Odd Fellows), to which I am medical officer. This person informed me that he had been ill for *three weeks*, and attended by "another doctor." I therefore gave him a blank form of the Lodge to which he belonged, and told him that the signature of the gentleman under whose care he had been would be sufficient (presuming that he had been seen by a properly qualified gentleman), as that was the usual etiquette of the profession. The man returned in the evening (during my absence at an accouchement), and asked the dispenser to fill up the form—a thing which that gentleman very properly declined to do. The dispenser, however, found out that this man had been under the treatment of a *chemist* only, from whom he had some seven or eight bottles of "stuff." I need hardly remark that this "chemist-physician" did *not* sign the certificate which I had given to the man in the morning (for he well knew that his signature was worthless), and so it came to pass that the man came again in the evening to have his certificate filled up.

Last month I was speedily summoned to attend a woman who was "dying." On arrival I ascertained that she had been delivered of a seven and a half months' fœtus. The woman told me she had been attended by a chemist, whom she thought at the time was a properly qualified medical gentleman. This chemist-accoucheur called the day following delivery, and did not again appear on the scene, although twice sent for, until four days had elapsed from his last visit. On my arrival I found the woman with a pulse of 120, a temperature of 103° F., great prostration, and localised peritonitis; in fact, puerperal metritis. I am happy to say, however, that, under judicious treatment, these unpleasant symptoms abated, and the woman recovered. But I should also state that she told me most positively that the chemist who attended her *visits* and *prescribes* for many families in the neighbourhood.

The next case was one in which a patient hobbled into my room late one evening. This gentleman had received an injury to the ankle by *direct* violence. He had gone to a neighbouring chemist, who told him he would be "all right in a few days." This chemist examined the leg (so my patient said), ordered some medicine and an embrocation. I also examined the leg, and found a *distinct fracture of the fibula*, about two and a half or three inches above the joint, and treated the case accordingly.

Now, Mr. Editor, a few remarks bearing on the salient points of these cases may not be out of place.

In the first case, I will not certify for a man who has never been under my care. The Lodge to which the man belongs will not accept the chemist's signature (very properly), and the poor man is therefore at the loss of three weeks' sick pay for the time he was ill.

With respect to the "puerperal" case, is it not too bad that these chemists should be allowed to visit and attend accouchements. What if it had been a cross-birth, or retained placenta, or any of the more serious complications of midwifery? But this is not the worst feature of the case. I was told by the poor woman that this chemist is recognised as the "family doctor" by many people in the neighbourhood, and, that being so, it is not improbable that he may have visited some of the fever cases, attended the woman, conveyed some infection, &c.

The last case caused great expense and much discomfort to the poor sufferer. Relying on what the chemist had said, this gentleman sent his wife to the south of England, and promised to join her on her holiday trip; but the swelling did not go down, nor did the pain lessen, and the poor fellow left my surgery very much down-hearted when I told him that his holiday trip should be deferred, for the present at all events.

Meantime it behoves all medical men to put their shoulders to the wheel, and strive to stop this practice, which despoils qualified gentlemen of their legitimate gains, and lowers the dignity of the noble profession of their adoption.

I remain, Sir, yours truly,

August 23rd, 1877. AD OMNIA PROMPTA.

CONGRESS OF GERMAN PHYSICIANS AND NATURALISTS.

THE fiftieth gathering of the Naturalists and Physicians of Germany takes place this year at Munich, and its sittings will last from the 17th to the 22nd September. The programme is as follows:—On the evening of Monday, the 17th, there will be a meeting in the old Town Hall. On Tuesday, at 9 A.M., the first general sitting will be held in the Odéon, and the proceedings will comprise a welcome to the Congress by Dr. Pettenkofer; an exposition by Dr. Waldeyer, of Strasburg, "On Baer and his place in the History of Evolution"; and another exposition by Professor Häckel, "On the Present Doctrine of Evolution in relation to Universal Science." Wednesday, at 8 A.M., will include the constitution of the Sections in the Polytechnic, and opening of the sittings by the different Presidents of the same. At 3 P.M. the Sections will hold their sittings. On Thursday, at 10 A.M., takes place a second general sitting, when Dr. Tschermak, of Vienna, will read a paper "On the Early History of the Terraqueous Globe"; Dr. Klebs, of Prague, "On the Revolutions in Medical Theory during the last Decennium"; and Dr. Neumayer, Director of the German Marine Observatory at Hamburg, "On Meteorology in Everyday Life." In the afternoon there will be a visit to the Scientific Museums and Institutes, and in the evening a *conversazione*. On Friday, at 8 A.M., the Sections will resume their sittings, and again in the afternoon. On Saturday, at 10 A.M., takes place the third general sitting, which will include papers (subjects not yet fixed) by Prof. Rudolf Virchow, of Berlin; by Dr. Avé Lallement, of Lübeck, "On Animal Life on the River Amazon"; and by Prof. Günther, of Ansbach, "On the most recent Advances in the Mathematico-historical Field." In the afternoon an excursion party sets out for Bernried, on the Stamberger Lake.

Mr. Benton's communication shall receive attention.

IS THE FLESH OF ANIMALS AFFECTED WITH PLEURO-PNEUMONIA FIT FOR HUMAN FOOD?

To the Editor of THE LANCET.

SIR,—I see in your issue of the 18th instant a letter from Dr. Cameron, in which he, by implication, charges the officials of the North Dublin Union with selling for human food the carcasses of animals which are unfit for that purpose, and stating that the defence put forward for this conduct is an allegation that in England the sale of the flesh of animals killed whilst affected with contagious pleuro-pneumonia is openly permitted.

Now, even if the latter statement is correct, it seems to me that the point at issue is not whether such meat is openly sold in England, but whether it is or is not fit for human food. That this is a question of considerable importance is undeniable, and it would be most satisfactory if some thoroughly reliable experiments were had recourse to in order to decide as to the unwholesomeness or otherwise of the flesh of pleuro-pneumonically affected animals which have been slaughtered in the *second* stage of that malady; for, as a matter of fact, "lung distemper" is seldom detected until considerable organic pulmonary changes have taken place.

Looking at the matter from a purely physiological and theoretic point of view, it seems easy to prove that all meat from animals killed when in a febrile state is unwholesome; but having regard to the facts and experience of the past thirty-five years, I believe that there is little or no evidence whatever to show that the flesh of pleuro-pneumonically affected animals has ever caused disease, or even the most transient illness, in persons who have partaken of it, and that it has been largely consumed as human food there is no doubt. It is within my own knowledge that a quantity of this class of meat is weekly disposed of in England, and in this town it is frequently sold and consumed without, as far as I can learn, any ill-effects following its use. I have myself eaten portion of an animal which I have no doubt Dr. Cameron would have condemned *if he had seen the lungs*, and I must say the beef was excellent, and in no way impaired either in flavour or appearance, neither myself nor the half-dozen of persons who also partook of it in my house suffering the slightest inconvenience.

Dr. Cameron asks the various sanitary medical officers to inform him, "Is the flesh of animals affected with pleuro-pneumonia allowed to be sold in their districts, and if so, in what stage?" I would respectfully suggest that if any of these gentlemen do not allow such meat to be sold, it would be well that they should state what are their reasons for prohibiting its consumption, and also if they have ever known it to produce any, even the slightest, ill-effects in persons who have eaten it.

Theories which are unsupported by facts may occasionally be correct; but theories which are in direct opposition to well-known truths are usually untenable; and as in the present state of science neither medical men, chemists, veterinary surgeons, nor any other persons have an accurate knowledge of the conditions which render meat unfit for human food, until some conclusion is arrived at, based on positive evidence, and not on dogmatic, haphazard opinions, it would be just as well to allow a class of meat to be used which has not yet been proved to be injurious, and which practical experience for years past tends to show is at all events innocuous.

I am, Sir, yours obediently,

Drogheda, August 20th, 1877. THOS. H. SIMCOCKS, M.R.C.V.S.

LAUNDRIES.

WE have to thank *Mr. W. H. Dore*, of Bournemouth, and other correspondents, for communications with respect to the improvements which have been already effected in laundry arrangements and appliances. We shall be happy to receive reports from establishments conducted under medical supervision, and in compliance with sanitary laws.

A. B. C.—All who are occupied constantly in delicately co-ordinated movements are liable to an affection analogous to writers' cramp. But it must be remembered that in the habitual occupation any other form of weakness first reveals itself.

Ignoramus.—We do not know the exact composition of "amalgum," and therefore cannot tell whether it is injurious.

L.S.A.—In the year 1859 a Committee, presided over by Dr. Morris, of New York, reported that out of 630 families in which the parents were "first cousins," there were 955 "perfect" to 1036 "defections" children, making a percentage rate for the latter of 66·9. The table is quoted in Dr. Seguin's translation of Wagner's General Pathology, p. 41. Mr. Francis Darwin has recently published a paper on Intermarriage.

Madame Stuart's letter shall appear shortly.

ALCOHOLISM AND MEDICAL STUDENTS.

To the Editor of THE LANCET.

SIR,—The subject of "alcoholism" has lately been well ventilated in your columns, but there is one phase of it that perhaps has hardly met with sufficient attention.

The great vice of our ancestors was "getting drunk"; the great vice of the present day is "drinking." In the "good old times" more alcohol was taken at a sitting, and the effect was clearly exhibited before the end of the meal; but I most firmly believe that the young men of the present day drink quite as much, only, as it is diffused over a longer space of time and taken at frequent intervals, the direct effect is not seen so plainly.

Drinking much and getting intoxicated at meals is undoubtedly a thing of the past, and no man would be considered in "good form" did he follow the old custom; but *drinking between meals* from breakfast to bedtime is most surely a daily increasing vice, and it is to this I wish to draw your attention.

It is hardly possible to meet a friend—I am speaking as a young man—in the streets nowadays without, after the usual salutations have been given and exchanged, the question "What will you drink?" being asked. It comes as naturally to some men as "How do you do?" to most. There is hardly any business done in the City without the aid of sherry-and-bitters or some other compound. This may be considered rather a sweeping remark, but I can only state what is my daily experience of what goes on around me.

I am sorry to say that it is not only the "non-professional" who is a victim to this habit, but that it is found largely amongst students of medicine, not only in England, but in Scotland also. I have had much experience in medical schools of both countries, and can affirm with truth that this vice of constant and oft-repeated "nipping" is daily and hourly increasing. In Scotland perhaps the evil is rather worse, as, spirits being cheaper than here, more is obtained, and the effects come on more quickly.

If one calls on a fellow-student in his rooms, it would be considered as a breach of the great unwritten law of hospitality if he did not very soon either ring his bell or open his sideboard and pro er his guest "beer, wine, or spirits." Of course it is easy to say "No," but I fear that the system is so deeply rooted that one very rarely hears that answer. It is perfectly astonishing what an amount of alcohol is daily taken by some in this way. "Little, but often" seems to be their motto. As long as they do not get intoxicated, most of them seem utterly oblivious that they may have been taking too much. They appear regardless of the consequences that must follow sooner or later.

That there will have to be a crusade against this "constant nipping" are long is certain, or the consequences to the generation following, and to the drinkers themselves, will be disastrous. The remedies are difficult to suggest with regard to the general public, but an appeal to the student's intellect ought to be sufficient. The student ought to have the baneful effects of alcohol on the system much more clearly and authoritatively laid down before him both in the lecture theatre and in the text-book. Let him be taught by the surgeon and pathologist that the *physical* effects of this constant dosing the system with spirit are even worse than the moral. Pamphlets have been written repeatedly on this subject; but we students rarely read them, and only take in what is taught in our books and by our professors.

I am sure that if men really could realise the pathology of this matter, they would not only give up the habit themselves, but be ready to advise their patients to do so, and thus stem the torrent of its increase. I write as a student who has mixed with large numbers of men both in London and Scotland, and only fear that I have not made my statements strongly enough.

Hoping that by your valuable aid this subject may be opened up, and the bullseye of public opinion cast upon it,

I remain yours faithfully,

August, 1877. A MEDICAL STUDENT.

*** We are extremely unwilling to believe that there is not some inaccuracy in the statements of our correspondent as regards the drinking habits of medical students. We fear our correspondent is too sanguine in expecting that for their special benefit, and to keep them from drinking, special courses of lectures should be delivered to them at their respective hospitals on the pathology of alcoholism. No one would resent the implied censure so much as they, and they would resent it by absenting themselves from the course of lectures on pathology with an oblique reference to their morals. Medical students who drink between meals, and who are always "nipping," are without excuse. Such a system poisons the blood, and leads more surely to deterioration of the tissues than an occasional debauch. But if practised at all, it is practised on social, and not on physiological grounds. A first-year's student may easily learn that alcohol introduced frequently into the stomach deranges its functions, goes soon through the liver and into the blood, whence it soaks into every organ and tissue, favouring degeneration. It is not for want of such knowledge that he takes beer or spirits at all times. Those who indulge in such practices, as unphysiological as they are immoral, should, after kindly remonstrance, be discountenanced by all students who respect themselves or their profession. There is nothing hospitable or dignified in converting private rooms into drinking saloons. We trust every medical student, by his life and conduct, will refute the statements of our correspondent, who we have reason to know is not biased against his class, and will be glad to have his statements disproved.—ED. L.

CURIOUS, IF TRUE.

THE case of *l'homme à la fourchette*, upon whom Dr. Léon Labbé performed gastrotomy with at least temporary success a few months ago, is brought to mind by an instance of swallowing foreign bodies recorded in a recent number of the *Southern Argus* (S.A.). A convict in the Gundagai Gaol, undergoing a term of imprisonment for stealing a ring, used to gain a living by travelling from town to town giving performances in which he offered to swallow any article his audience might select. The ring for the stealing of which he had been convicted he had swallowed, and he asserted he could swallow a bagful if he got them. The prisoner is at present being treated by Dr. M'Killop, visiting surgeon to the gaol, with the view of making him disgorge a steel albert chain and a large brass ring. The chain can be distinctly felt at the bottom of the stomach, and the patient says he swallowed it nine months ago, and that it is the only article he has had any difficulty about. He avers that he has had two pounds weight of jewellery in his stomach at one time, and that he has harboured watches in that viscus for twenty-four hours. The gaoler is said to have a collection of albert chains, penknives, brass rings, &c., which he asserted he had succeeded in causing the prisoner to vomit by means of emetics. This case, if correctly reported, presents features worthy of being studied from a physiological point of view.

SUMMER DIARRHŒA.

To the Editor of THE LANCET.

SIR,—In a letter to THE LANCET last August I wrote that the most frequent causes of summer diarrhœa seem to be the great difference between the day and night temperatures, exposure to draughts, and insufficient clothing. The statistics in your number for August 18th point to the same causes. The mean temperature was higher last year, and there were more excessively hot days, and more periods of such days. The mortality from diarrhœa last year, for a given six weeks, in twenty large towns was 3672; this year it is 1502. If the diarrhœa was caused by errors in diet, it would be more prevalent amongst those who eat, whereas sucking infants form a large class of those attacked, and these would not be affected by diet unless given other food, or through the mothers. The mothers, as far as I have seen, have been, as a rule, in fair health. Diarrhœa occurs less frequently amongst those who are properly clothed and watched. Amongst the lower classes, where care and proper clothing are least attended to, diarrhœa is most prevalent. In the summer the infants and children have less clothing, and the majority wear no flannel or an equivalent; the clothing is still less at night; they sleep in direct draughts, the clothes often damp, the face and chest exposed and often moist with perspiration. In this alone there is cause for diarrhœa. Decomposed food often acts as a direct cause, or as a predisposing cause with exposure as the direct cause. The diarrhœa can hardly be the result of neglect or misfeeding alone, or it would be more prevalent during the winter months, when these more frequently occur. I believe the frequency of, and mortality from, summer diarrhœa would be much diminished by attention to the clothing and avoidance of exposure.

It would be interesting to know whether the temperature has been higher in Leicester and Hull than in the other eighteen large towns, whether the diarrhœa has not also been prevalent amongst the adults, and what is the condition of the water, and where does it come from.

Yours faithfully,

Haverstock-hill, August, 1877. FRED. S. ALFORD.

CLUBS PAYING FIVE SHILLINGS AND UPWARDS PER HEAD FOR MEDICAL ATTENDANCE.

WE have received a second list of these institutions, which we reserve, and shall be glad to receive others to publish at the same time.

Paidagógos.—Yes; we are glad to see school hygiene engaging the attention of the physician. In addition to Dr. A. Riant's excellent volume, entitled "L'Hygiène et l'Education dans les Internats," recently recommended in THE LANCET, we have the elaborate work of Dr. A. Baginsky, "Handbuch der Schul-Hygiène" (Berlin, Denicke), who leaves no element in school life untouched, from the architecture and *matérial* of the schoolhouse upwards.

Inquirer, "a middle-aged bachelor," who has been "frightened nearly out of his life" by the disclosures recently made in our columns on the subject of laundries, will do well to discover some thoroughly cleanly and safe washerwoman until the fully appointed establishments we hope soon to see in operation begin work.

Q. V. cannot do better than refer to a series of papers on the subject by M. Villemin, published in successive numbers of the *Archives Générales*, ending with that of June last. Insomnia is there discussed exhaustively, both as to its causes and the agents, in the opinion of the author, most suitable and efficacious for its relief.

IRISH MEDICAL GRADUATES' ASSOCIATION.

To the Editor of THE LANCET.

SIR,—I am glad to see by your number for last week the formation of an Irish Graduates' Association. One thing I would beg to suggest to the Committee &c.: viz., not to meet at the same time as the British Medical Association; for in that case the large number of Irish assistants could not attend, as their principals would naturally go to the B.M.A., and someone must stay at home; whereas if the I.G.A. would meet, say a fortnight or so, after the B.M.A., and when most, if not all, the principals have returned home, the assistants could then take their annual holiday, and, by attending the meeting, combine instruction with pleasure.

I am, Sir, yours obediently,

WM. J. FRASER, B.A., M.B. Univ. Dub.

Ashburton, Devon, Aug. 27th, 1877.

Doctor.—There is no fixed scale of fees for civil cases. Payment depends somewhat on the standing of the witness and on the value of his time. Objection to unreasonable fees should be made at the time of being served with the subpœna, and before giving evidence. The fees per day in the Probate Court are, if resident at a distance of five miles beyond the place of trial, three guineas, and include board and lodging. For travelling expenses, the amount actually paid is allowed, provided that it does not exceed one shilling a mile one way.

R. T. J.—Our correspondent's claim is sound. We do not remember the other case to which he alludes. We shall be glad to hear the result of his own case.

Mr. E. A. L. Sobey, Mr. Alfred Harris, and others.—A general notice as to information with regard to volunteer professional services at the seat of war appeared in our issue of August 11th, page 227, to which we must refer our correspondents.

A CASE OF LABURNUM POISONING.

To the Editor of THE LANCET.

SIR,—Cases of laburnum poisoning being rare, and scarcely treated of in works on Toxicology, the following may be of interest.

J. W——, aged five years, ate a hearty tea at 6 P.M. At 7.30 P.M. he had a thick slice of bread-and-butter. At 8 P.M. he was known to have eaten a quantity of laburnum-seeds, saying they were peas. The parents, not being aware of their poisonous properties, were not alarmed. At 9 P.M. the child commenced to vomit. When seen at 9.30 P.M. he was very drowsy; the skin cold and clammy; pupils contracted; complained of no pain; pulse 108; axillary temperature 97·5°; respiration 22. The vomit appeared to be bread and mucus, mixed with a quantity of vegetable matter. I ordered an emetic of sulphate of zinc with sal volatile, which acted freely in ten minutes, the vomit consisting solely of water and a large quantity of mucus. Ordered a mixture of ether and ammonia every fifteen minutes.—10.15 P.M.: Drowsiness increasing; pupils dilated; pulse 130, very weak; respiration 25; rectal temperature 96°. Ordered strong coffee, which was immediately vomited.—10.30 P.M.: Cannot be roused for more than a few seconds; skin very cold, and bathed in perspiration; pupils widely dilated, and not sensitive to light. Given a hot bath and hypodermic injection of caffein. Stimulant medicine continued. From this time recovery was rapid, and at midnight the child was awake and rather lively; skin appreciably warmer to the touch, but bathed in perspiration; pulse 108; respiration 20; rectal temperature 97·6°; pupils much dilated, but sensitive. At 2 A.M., all symptoms appearing to have passed off, the child was allowed to sleep, and awoke the next morning in its usual health. The pupils, however, remained dilated for twenty-four hours longer.

The symptoms would, no doubt, have been more severe but for the presence in the stomach of a large quantity of food, and the rejection of the whole of the vegetable matter with it.

I am, Sir, yours truly,

A. MILSON ROBERTS, L.K.Q.C.P.I., &c.

Buckhurst Hill, Essex, Aug. 30th, 1877.

A very Old Subscriber.—1. No; the blue line may be produced by other metals than lead: *e. g.*, copper.—2. We have never known it to be caused by uncleanliness alone. Its production is due to the formation of a sulphide of the metal from the decomposition of tartar. Hence it does not appear in the subjects of lead-poisoning who pay attention to their teeth.

R. R.—We know of no remedy.

Army Surgeon.—We cannot agree with our correspondent that army surgeons who are compelled to fall back on private practice may be excused for advertising their desire to obtain patients. The recourse to these irregular modes of advancing personal interests is unprofessional, and therefore reprehensible.

"DEATH BY THE VISITATION OF GOD."

To the Editor of THE LANCET.

SIR,—With the consent of my partner, Mr. Greene, I send you the following account of a "Death by the visitation of God," which took place here within the last month.

On Sunday, the 5th inst., about 12 P.M., Mr. Greene was called to see a young man, living not five minutes distant from his home, to whom he went immediately, but on his arrival found him dead. The young man was eighteen years of age; but four months previously was passed by the medical man of a charity club. He had shown no sign of illness, and had been to chapel four times on the day of his death. Before retiring to bed he had taken supper, and after that his customary glass of water from the pantry. When his father went into his bed-room later to see the light out, he said "Good night." A little later his sister heard a noise in the room, and called the father, who, finding him ill, sent for Mr. Greene. He went immediately, but too late to be of service.

I have the word of one of the jurymen that only the father's evidence was taken at the inquest, and you will see from the enclosed extract from the local paper that coroner's pathology persists in this disease, "the visitation of God," as a cause of death.

Such are the facts of a case which I sincerely trust may be taken up by those who have interest in the public safety.

I remain, Sir, yours faithfully,

J. M'CALLUM M'CARTHY, M.R.C.S. Eng., &c.

Oakengates, Aug. 22nd, 1877.

Mr. Prowse.—We are not acquainted with any scheme of the kind suggested, and consider that, for many reasons, it would not, and could not, be successful. Winter residence at the Cape, or a voyage to Australia or New Zealand in a well appointed ship, is a more practical way of treating pulmonary cases.

Therapeutist.—According to the observations of M. Dujardin-Beaumetz, bromo-hydrate of cicutine does not excite the sensibility of the pneumogastric, in that respect differing from curara, which in other of its physiological actions cicutine resembles. M. Beaumetz prefers to administer the latter drug hypodermically, though he states it is well borne by the stomach in doses of fifteen centigrammes.

Anthrax.—The last edition of Druitt will prove useful. Bryant is very good, but somewhat larger.

Æsculapius.—We are unable to answer the question on so meagre a statement of the facts of the case.

An Alumnus. — The information desired will be found in detail in our Students' Number to be published next week.

PECULIAR ACTION OF MAMMARY GLANDS.

To the Editor of THE LANCET.

SIR,—It is rare that after a natural stimulus any gland will persistently fail to fulfil its function, and the following case seems worthy of record, where the mammary glands, after three successive confinements, not only failed to secrete, but showed no signs of excitement, being no larger than before the commencement of pregnancy. How the fourth pregnancy should have been followed by a copious flow of milk might be called a freak of nature, but could scarcely be accounted for, as the midwife had it, by a change of sex in the child.

Mrs. W——, aged forty, was on July 27th delivered of a male child. This was her fourth confinement, all the former children being girls. Notwithstanding many attempts, directed by her medical attendant, on each occasion she was unsuccessful in inducing a flow of milk. Now she nurses her child, and has an abundant supply. I know of nothing to account for the change, as her manner of life &c. is the same, and this is her fourth child within ten years. The only peculiarity in the mother is an extremely nervous condition, and it seems possible that the hysterical state may have had such an effect on the sympathetic supply to the mammæ as to prevent the formation of their normal secretion.

Yours truly,

Perth, Aug. 25th, 1877. ALEX. BAND, M.B. & C.M.

COMMUNICATIONS not noticed in the current number shall receive attention in our issue of the ensuing week.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Macnamara, London; Mr. Tait, Birmingham; Dr. Dupré, London; Mr. A. P. Gould, London; Mr. Maccall, Crook; Mr. W. R. Williams, London; Mr. Bodger, Leighton Buzzard; Mr. Walker, Baildon; Dr. Brand, Perth; Dr. Alcock, Aldershot; Mr. Dolan, Halifax; Mr. A. Eccles, Torquay; Dr. Bright, Cannes; Dr. Konge, Lausanne; Mr. Black, East Riverside, U.S.A.; Dr. Finch, Salisbury; Messrs. Barwell and Co., Bristol; Dr. Hawkes, Westbrooke; Messrs. Richardson and Co., Leicester; Dr. Eddison, Leeds; Dr. Rowell, Plaistow; Dr. O'Neill, Lincoln; Messrs. Buck and Sons, Dalston; Messrs. Herts and Co., London; Mr. Newman, Margate; Mr. Kennedy, Stratford; Mr. Mole, Walworth; Dr. Nicholas, Wandsworth; Dr. R. Lawson, Banstead; Mr. Sweet, Tenbury; Mr. Benton, Highgate; Mr. Vernon, Leeds; Mr. Fraser, Ashburton; Mr. Jeffreys, Chesterfield; Mr. Harris, Willington; Mr. A. W. Mackenzie, London; Mr. Burroughs, Clondall; Mr. Bailey, Ticehurst; Mr. Archer, Alnwick; Mr. Hunter, Aberdeen; Dr. Leppert, Nice; Dr. V. D. Harris, London; Mr. T. Cooke, London; Mr. Copeman, Truro; Dr. Monckton, Rugeley; Madame Stuart; Mr. Beeton; Mr. Dore, Bournemouth; Mr. Elliott, Carlisle; Mr. R. Edwards, Chepstow; Mr. M. Matthews, Edinburgh; Mr. B. le Dewe, Dieppe; Mr. Walford, Enfield; Mr. P. Bennett, Ware; Mr. Evans, Chelmsford; Mr. W. B. Charly, Birmingham; Dr. Ramsey; Messrs. Salt and Son, Birmingham; Mr. Kenyon; Mr. Hampson; Dr. Duncan, Glasgow; Mr. Smith; Mr. Bunting; Dr. Gillespie; Mr. Prowse, Cambridge; Dr. Cullough; Dr. Eberle; Subscriber; Ancien; F.R.C.S.; A Workhouse Medical Officer; Anthrax; R. R.; Director-General, Army Medical Department; Ad Omnia Prompta; The Military Secretary, India Office; Common Sense; Juvenis; A. M.; A Pensive Surgeon; C. W. L. B.; An Enquirer; J. S. A.; J. H. A.; Army Surgeon; H. G. L.; C. R.; E. J., Bristol; Dr. P., Holborn; Student; Anti-Claptrap; A General Practitioner; W. E.; One who Sympathises with Turkey; Registrar-General of Edinburgh; Peace; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from — Mr. Bryant, Clapham-road; Messrs. Dawson Brothers, Montreal; Messrs. Cribb and Co., Bishop-Stortford; Mr. Robertson, Glasgow; Mr. Davidson, Carlisle; Dr. Maynard, Bishop-Auckland; Dr. Norton, Dorchester; Dr. Sylvester, Pimlico; Dr. Gill, Dover; Mr. Harris, Hackney; Mr. Saunders, Holloway; Mr. Rutter, Notting-hill; Dr. Shearer; Dr. Crean, Barbadoes; Dr. Plain; Mr. Anness; Dr. Alderson, Hammersmith; Dr. Chambers; Mr. Clutton; Mr. Bingham; Dr. Tolerton, Malmesbury; Mr. Kemble; Mr. Buchan; Dr. Clarke; Mr. Lewis, Dover; Mr. Walford; Mr. James, Blackwood; Mr. Coombe; Mr. Fitzgerald; Physician, Fyfield; Assistant, Dover; Medicus, Chesterfield; E. T. C.; T. A. L.; R. S., Oswestry; Alpha, Huddersfield; M. E.; G. R., Derby; Medicus, Penrith; M. D., Skipton; E. W., Brighton; Cyclops; M. A. H., Coventry; Verte; X. 20, Manchester; Sigma; R. C. S., Brighton; M. B.; M. R. C. S., Bristol; A. Z.; A. R. P., Burton-on-Trent; E.; D. C.; R. S. L., Dublin; A. W., Cheltenham; M. D., Stoke-on-Trent; Studens, Brighton; W. S.; M.R.C.S., Whickham; Medical Pupil; Medicus, Dorchester; W. W. M.; C. A., Banff; Medicus; M.D.

Whitehall Review, Tatler, Eddowes's Shrewsbury Journal, Northern Whig, Otago Daily Times, La France du Nord, Sheffield Daily Telegraph, Devonport Independent, West Somerset Free Press, Nashville Banner, and *Bournemouth Observer* have been received.

METEOROLOGICAL READINGS

(Taken daily at 8 a.m. by Steward's Instruments.)

THE LANCET OFFICE, AUG. 30TH, 1877.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia. in Vacuo	Max. Temp. Shade	Min. Temp.	Rainfall.	Remarks at 8.30 A.M.
Aug. 24	30·21	W.	53	56	94	69	56	...	Overcast
,, 25	29·91	E.	57	60	86	67	53	0·02	Overcast
,, 26	29·66	W.	62	66	99	69	58	0·42	Overcast
,, 27	29·91	S.W.	63	65	77	68	57	0·26	Overcast
,, 28	29·75	W.	60	61	106	72	61	...	Raining
,, 29	30·02	N.W.	58	63	106	73	57	0·04	Cloudy
,, 30	29·88	W.	57	61	104	65	55	...	Cloudy

Medical Diary for the ensuing Week.

Monday, Sept. 3.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

Tuesday, Sept. 4.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.

Wednesday, Sept. 5.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 3 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

Thursday, Sept. 6.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

Friday, Sept. 7.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, Sept. 8.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

NOTICE.

In consequence of THE LANCET being frequently detained by the Post Office when posted for places abroad *more than eight days after* publication, subscribers and others are reminded that such copies can be forwarded only as book packets, and *prepaid* as such.

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